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THE CALIFORNIA QUARTERLY OF SECONDARY EDUCATION *was established in October, 1925. An extension of its service was made possible in 1927 through a gift by Mr. Carl F. Schader of Santa Monica, California. In his letter of grant, Mr. Schader said:*

"Every possible encouragement should be extended to teachers to use the scientific method in their study of problems in education and in the application of such study to the construction of a curriculum that will square itself with the constantly changing conditions of a modern, scientific age, embracing the physical, intellectual and spiritual nature of man. In this field I see great opportunity for laymen to co-operate with our educational leaders for the improvement of the public secondary schools of the State and Nation."

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Progress Report for 1928-1929

To the Membership:

The SOCIETY during the year just concluded has moved forward toward its objectives at a somewhat better rate of speed than in other years since its foundation.

THE QUARTERLY has been issued regularly and has met with an increasing degree of favor. The Directory was published in an expanded form, at an earlier date than heretofore. Studies and investigations have been set on foot which have given notable encouragement to that spirit of inquiry so important if teachers are to meet adequately the problems which face them day by day in the classroom.

The annual meeting of the Board of Directors of the SOCIETY was held in Oakland on March 26, 1929. The report on membership indicated a steady growth. Directors Frank H. Boren, George C. Jensen, Albert C. Olney, and William M. Proctor were reelected for a term of six years. Officers elected were: President, A. J. Cloud; Vice-president, George C. Jensen; Secretary and Managing Director, Horace M. Rebok. Former members of the Executive Board were reelected for another year.

The Board of Directors made preparations toward reorganization of the SOCIETY, under Section 606 of the Civil Code, as announced in the April 1929 number of THE QUARTERLY. A Committee of nine was appointed on Educational Research, for the purpose of endeavoring to coordinate to a larger degree the organization of research activities in the several schools and school departments of the State. Dr. Frank C. Touton was named Chairman of the Committee.

It is our belief that the SOCIETY has continued to function measurably well as a professional bureau to render service to the secondary institutions of the State. It has had an earnest and representative group of teachers and administrators interested in the improvement of secondary education. These men and women feel assured that the work of the SOCIETY is of such fundamental value that greater and greater contribution to its success will be given, each year henceforth, by the professionally-minded teacher and executive.

A. J. CLOUD, *President,*
California Society of Secondary Education.

WHAT KNOWLEDGE IS OF MOST WORTH?

DR. DAVID STARR JORDAN

The question asked in the above caption has been asked by philosophers through the ages. It is in the mind of youth. Recently the question was put to Dr. David Starr Jordan by the editor of The Polytechnic Parrot, *the school paper of the Polytechnic High School of San Francisco, but in this form, "What subject is most important to learn in school?" Dr. Jordan replied in an exclusive article published in* The Parrot *of January 21, and his reflections are worth repeating here.—Editor's Note.*

If all boys were alike, it might be easy to answer your question in a single word, "What subject is most important to learn in school?", but fortunately not all boys are alike. The subject most important depends upon the boy and his purpose in life, and what are his natural abilities. In many cases most important of all is who shall be his teacher, for the true teacher is not the man or woman who hears his recitations. Much of the time spent in classrooms or in lecture rooms is time wasted. The true teacher is the one who enters into the student's life, the one who can show him the great vistas in this world of ours, and in the great universe in which the world, the teacher, and the student each forms a part.

In general that study is worth most that the student can digest and assimilate. Each subject to someone is more valuable than any other. From most points of view, that study is best that most urges toward clear thinking and broader knowledge. Much is to be said for those disciples that lead us directly to the best and deepest thought of other men. For this reason certain types of studies, history, languages, philosophy, are called the humanities because their existence depends on the human elements.

In a famous essay, Herbert Spencer declared that the knowledge of most worth to a man is that which enables him to understand himself. As man is a glorified animal, he should need for self understanding the elements of biology, zoology, botany and human physiology. Not to know how the human body is constructed is to pile up learning and experience around a central core of ignorance. Not to know in some degree the ways of animals and plants and the rocks and shores and forests that hem them in is to miss thhe finest inspiration a student may draw from any source. And behind all this is the advice Emerson gave to his daughter: "It does not matter what you study. It all lies in who your teacher is."

All good teaching incites the student to think and search for himself. A teacher may know many interesting facts, but these are useful to the student only as he digs them out himself. Good teaching does not load up the student with information. It trains the student in the way of finding his own facts. This is the value of nature study. It gives no facts except those for which the student must wrestle with Nature herself. If Nature speaks on any subject you can ask no higher authority, and you can get none. Professor Agassiz, one of the greatest teachers, used to say, "This is the charm of study from Nature herself. She brings us back to absolute truth whenever we wander."

If, therefore, I should answer the question which I started by naming a single subject I should say that the subject of most worth would be natural history—not studied in books, nor too much in laboratories even, but as taught by a real teacher, one who could lead and inspire, and who would be wise enough to keep out of his student's light while engaged on problems of nature.

For myself, I may say that when I was in secondary school I gathered languages and mathematics, because I thought I might "need them in my business." It turned out that I did, and I have used over and over all that I ever learned. The study in which I was most interested from boyhood and on through college wass botany. This I made my major subject, though later on, in graduate work, I widened it out to include zoology and geology. Thus in time I came to live three different lives at once. First as a naturalist and explorer for the love of it; next as teacher of natural science, also for the love of it, becoming by a series of accidents a university president; then, finally from a sense of duty in a world going mad, I became what I call a "minor prophet of democracy."

Contents of previous issues of the CALIFORNIA QUARTERLY *of Secondary Education may be found by consulting the Readers' Guide in your library.*

A STUDY OF VOCATIONAL INTERESTS OF CALIFORNIA HIGH SCHOOL STUDENTS BASED ON A SURVEY OF TWELVE RURAL HIGH SCHOOLS*

J. H. BEDFORD
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INTRODUCTION. The secondary schools of America are entering upon a period of rapid change and readjustment. The program of the secondary school has failed to keep pace with the changing character of its students on the one hand, and with the changing demands of a rapidly developing industrial democracy on the other. The objectives of American secondary education now need to be redefined in terms of a changing social order.

Vocational education has brought a new conception of the function of the secondary school. It has pointed out the most vital problem which confronts the secondary schools of America today, namely, the adaptation of the raw material of education to the occupational world. We are beginning to realize that most other problems, social, political, and economic, find their solution in the occupational adjustment of the individual.

But we are largely ignorant not only of the raw material with which we have to deal but also of the demand for that material in the labor market. What changes are brought about in that raw material by the elaborate process which we call education, and how well the finished product meets the actual demands of the occupational world, we do not know. A conscious and purposive adaptation of the raw material of education to the occupational needs of society is now demanded of the secondary schools of America.

Before a satisfactory adjustment can be made, however, a number of questions must be answered. And these questions can not be answered in any other way than on the basis of scientific research. Henceforth the direction which educational practice shall take will be determined not by opinion or tradition but on the basis of scientific study.

What educational readjustments are needed in order to meet the vocational interests of high school students on the one hand, and the demands of the occupational world on the other?

What are the predominant attitudes of high school students toward the work of the world?

What changes in these vocational interests and attitudes are desirable, and how shall these changes be brought about?

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* *Acknowledgments.* **Without the interest and cooperation of a large number of professionally-minded people, this study would have been impossible.**

The author is particularly indebted to Dr. Edwin A. Lee, Director of the Division of Vocational Education, University of California, for kindly criticism and personal encouragement; to Dr. Giles M. Ruch, Professor of Education, University of California, to whose original suggestion the present form of the study is due; and to Dr. Nicholas Ricciardi and Mr. Walter E. Morgan of the State Department of Education, whose willing cooperation and assistance have made this undertaking possible.

The author's appreciation is extended to all others who, in the spirit of professional service, have cooperated in this study.

Which should be considered of most importance, the vocational interests of the individual, of the community, or of society as a whole?

To what extent should the vocational program of the high school be determined by local conditions?

What is the place of vocational guidance in the high school?

These are a few of the problems which are now demanding solution. Progressive educators everywhere are seeking help in answering these questions; and it is in the hope that some light may be shed on these and other related problems in the field of vocational education that this study is presented.

The Nature of the Study. The present study had its inception in a survey which was made by the author in connection with a program of vocational guidance undertaken at the Escalon Union High School at Escalon, California, in the fall of 1927.[1]

This survey revealed some rather startling conditions which demanded further study. Were the conditions found in this school typical of the high schools of California in general, or was this an exceptional condition?

In order to answer this question beyond a reasonable doubt, it was proposed to undertake a state-wide survey under the direction of the University of California and in cooperation with the State Department of Education.

The Schools Surveyed. In order to secure a representative cross-section of the state, a geographical sampling of twelve rural high schools was decided upon. No two of the schools were located in the same county, and they were rather evenly distributed between Northern and Southern California. The valley, the coast, and the mountain sections of the state were about equally represented. Except that the selections were confined to rural high schools having enrollments of two hundred students or less, the sampling was entirely random. The larger city high schools were not included, as each city has its own peculiar local conditions which do not hold true for a large geographical area such as a state. The schools chosen ranged from Siskiyou county on the north to San Diego county on the south. The sampling, therefore, may be considered as fair, and the schools selected as representative schools within their class.

The number of schools selected for the survey was limited to twelve as this number was considered to be sufficiently large to base general conclusions upon, and at the same time not too large to forbid an intensive study. It was felt that a thoroughgoing study of a small number of schools would be of greater value than a superficial study of a larger number.

Figure 1 shows the location of the high schools which were included in the survey.

School number 1 is located in a community in the San Joaquin valley which is largely devoted to fruit raising and dairying. Like most of the others represented, the town has few industries but serves principally as a trading center for the surrounding countryside. Approximately one third of the adult population is of Swedish birth.

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[1] Special Bulletin No. 8, Series 1927-1928, Superintendent of Public Instruction, Sacramento, Calif.

School number 2 is also in a horticultural community but is located in the foot-hills of the Coast Range. The foreign-born element in the community is largely Southern European, the principal industry being grape culture.

The population of the community in which school number 3 is located is almost entirely native born. Located in the warm foot-hill region of the Sacramento valley, the people of this community are chiefly engaged in fruit raising.

School number 4 is located in a dairying community. Approximately one-half the adult population is of foreign birth, the predominant nationality being Swiss.

The population of the community in which school number 5 is located is almost entirely of American birth. In character it ranks well above the average. It is located in the extreme southern part of the state.

School number 6 is located in a small town in the raisin producing section of the San Joaquin valley. Only a few of the population are of foreign birth.

FIGURE 1.

MAP OF THE STATE OF CALIFORNIA SHOWING THE LOCATION OF THE HIGH SCHOOLS SURVEYED

School number 7 is located in a town of about one thousand population. Located in the rich delta region of the San Joaquin valley, the community is engaged principally in fruit growing. The population is chiefly American, although there are a number of Japanese and other nationalities represented.

The town in which school number 8 is located has a population of about twelve hundred. It is largely a residential community, many of the inhabitants being wealthy and owning large estates. The chief industry is horticulture.

School number 9 is located in a fertile valley in the arid region of the south. The town itself has a population of about 1600, mostly of native birth.

The population of the community in which school number 10 is located has a large percentage of foreign born, most of whom are engaged in dairying. It is located in the northern coast region.

School number 11 is located in a mountainous section in the north. The town is a division point on a railroad and many of the inhabitants are engaged in railroading. The town itself has a population of about 2500.

The town in which school number 12 is located is a lumbering community of 1200 inhabitants. It is located in an isolated section on the northern coast and is provided with few transportation facilities except by water. Most of the inhabitants are employed by two large lumber companies.

The Technique of the Survey. In order that the results of the survey might be comparable with the preliminary study made of the Escalon Union High School, it was decided to use the same questionnaire and to follow the same general procedure as was followed in studying the vocational interests of the students of that school. This questionnaire was not very different from those now generally employed in connection with individual pupil advice and adjustment in vocational guidance.

The effect of suggestion was minimized to a great extent in the questionnaire used.[2] No explanation or remarks were permitted except those specifically given in the directions furnished.

[2] For form of questionnaire, see Appendix.

The respective enrollments of the twelve schools covered in this survey, together with the number of students studied in each school, both boys and girls, are shown in Table 1. For obvious reasons, the names of the schools are not included but are designated by number.

TABLE I

ENROLLMENTS OF SCHOOLS WITH NUMBER OF CASES STUDIED

		Number of Cases Used		
School	*Enrollment*	*Boys*	*Girls*	*Total*
1	160	68	82	150
2	177	73	75	148
3	80	38	33	71
4	102	32	45	77
5	65	33	29	62
6	100	38	29	67
7	126	52	64	116
8	72	31	35	66
9	151	59	50	109
10	126	43	61	104
11	204	77	72	149
12	115	49	43	92
Totals	1478	593	618	1211

Vocational Interests and the World's Work

If we are to accept the evidence offered by scientific psychology pointing to the fact that the most fruitful field of work for our schools lies rather in the inculcation of right habits, attitudes and ideals than in the development of the powers and capacities of the mind, then it is fitting that we should be somewhat concerned about the attitudes of boys and girls toward the work of the world. Nowhere else do we find these attitudes better reflected than in the vocational choices of our students.

Figure 2 presents a graphic representation of the vocational interests of 1211 rural high school boys and girls as compared to the work of the world. The number of cases on which this graph is based is sufficiently large to assure us of the fact that this is a fairly accurate picture of the conditions as they exist throughout the rural sections of California.

Since the most reliable data from which to judge the present opportunities and needs are found in the United States census reports, these data have been used as criteria in this study. The census figures are based upon the total number of persons ten years of age and over gainfully occupied in the United States.[3]

The figures given do not include housewives.

"Agriculture" includes farmers, fishermen, foresters, lumbermen, gardeners, florists, nurserymen, etc.

"Extraction of Minerals," or "Mining," includes miners, quarry operatives, oil operatives, etc.

"Manufacturing and Mechanical Industry" includes bakers, carpenters, electricians, laborers, machinists, painters, plumbers, etc.

"Transportation" includes truck drivers, chauffeurs, conductors, telegraph operators, locomotive engineers, firemen, etc.

"Trade" includes bankers, commercial travelers, real estate and insurance agents, retail dealers, etc. This classification would be better designated as "Commerce" because of its confusion with "the trades."

"Public Service" includes firemen, watchmen, policemen, soldiers, sailors, postmasters, postmen, etc.

[3] Fourteenth Census of the United States, Vol. 4, Chap. II.

"Professional Service" includes architects, artists, engineers, lawyers, musicians, physicians, teachers, trained nurses, etc. In general, "Professional Service" includes those occupations which require training of college grade.

"Domestic and Personal Service" includes barbers, housekeepers, janitors, nurses (not trained), waiters, servants, cooks, etc.

"Clerical Occupations" includes agents, bookkeepers, stenographers, typists, cashiers, accountants, etc.

FIGURE 2. VOCATIONAL TRENDS COMPARED TO U.S. CENSUS REPORTS FOR 1910 AND FOR 1920 BY PERCENTAGES.

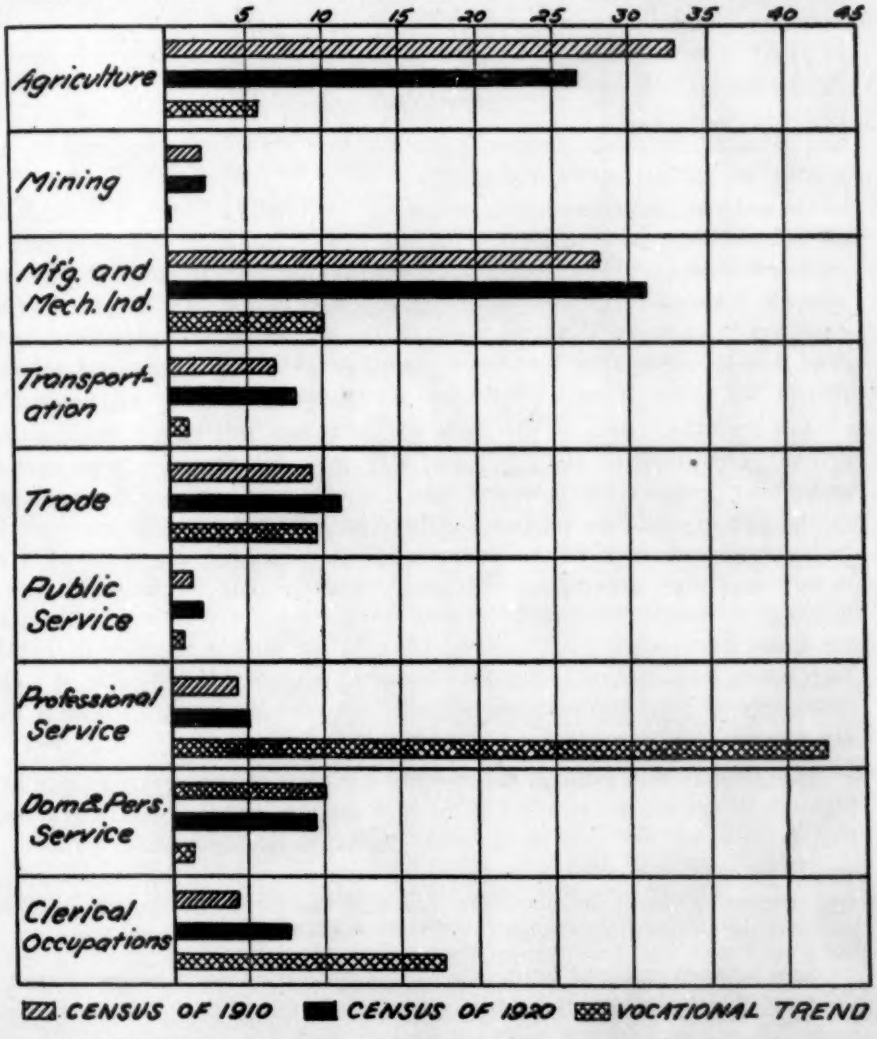


Figure 2 should be read thus: Of the total number of people in the United States gainfully occupied, about 33 per cent were engaged in agriculture according to the census of 1910, while according to the census of 1920 the percentage of people so engaged was about 26 per cent. Of the 1211 rural high school students studied, 6 per cent were found to have chosen this line of work; etc.

In Figure 2 the vocations chosen by the students have been classified into the general divisions of occupations on the above basis. The percentages shown, therefore, permit direct comparison. In order to show the vocational trends for the entire country over a period of years, the census figures for both 1910 and for 1920 are represented.

A study of Figure 2 will indicate that, measured on this basis, there is no relation between the vocational interests of the group of high school students studied and the vocational opportunities open to them. The percentage of students who have chosen agriculture is adequate to supply only one-fourth the demand in that line of work, as indicated by the census of 1920. On the other hand, there are eight times as many young people in the group interested in the professions (42.4 per cent) as there are places to be filled (5.2 per cent). Such a startling disparity between supply and demand, between vocational interest and vocational opportunity, is worthy of further study and analysis.

In order to properly evaluate the trends set forth in Figure 2, a number of factors must be considered. In the first place, high school students represent a selected group. The proportion of students in our high schools who are interested in the so-called higher walks of life would naturally be expected to exceed that found in an unselected group of high school age. And it is no doubt true that those young people who drop out of school recruit the ranks of agriculture and of industry.

On the other hand, in the State of California full time attendance is ordinarily required of every boy and girl up to the age of sixteen years, and, under certain conditions, attendance at part-time school is required up to the age of eighteen years. Furthermore, the tendency to consider a high school education as the minimum preparation for the work of life is now well-nigh universal. This is particularly true in the rural communities from which the students now being studied are taken. Although the exact figures are not available, consultation with a number of rural high school principals indicates that the proportion of young people of high school age in rural communities who are not enrolled in high school does not exceed twenty per cent.

But even if it is granted that twenty per cent of the young people of high school age are not enrolled in the high schools, and if it is also granted that this twenty per cent go to swell the ranks of agriculture, industry, etc., in proportion to their respective needs, the discrepancy between supply and demand will not be overcome, nor will the great over-supply in the professions be greatly reduced.

Still another angle of approach to this problem should be considered. Of the 1211 students in the group studied, it is found that 409 are freshmen, 338 are sophomores, 241 are juniors, and 223 are seniors. These figures show an apparent elimination from year to year. However, in view of the tremendous increase in school enrollment in California during recent years, these figures probably indicate, to a large extent, an increase in high school population.

No doubt the factor of elimination does operate to some extent, and it does tend to make the high school population a more or less selected group; but it does not operate to the degree that these figures seem to indicate. The estimate made by the high school principals previously referred to may still be considered as quite conservative.

Vocational Opportunities Studied by Sex

It has been shown that, on the basis of the census reports for the total population of the United States gainfully employed, the small percentage of students choosing agriculture and industry can not be justified; nor can we justify the excessively large percentage of students choosing the professions. It is manifest that the great discrepancy between supply and demand which has been discovered must be otherwise explained.

In Table II the analysis is carried a step further. The vocational trends found among the group of rural high school students are here compared to the census reports for 1920 by sex.

It is unfortunate that the census reports do not include housewives in the figures given. It may safely be assumed that at least eighty per cent of the females of the United States are occupied as home-makers. The percentages given under "Female" in Table II refer only to that group which includes those who are occupied outside the home, or about twenty per cent of the total.

TABLE II. PER CENT DISTRIBUTION COMPARED TO U.S. CENSUS FOR 1920 BY SEX.

GENERAL DIVISION OF OCCUPATIONS	MALE		FEMALE	
	SCHOOL	CENSUS	SCHOOL	CENSUS
Agriculture	12.2	29.8	.2	12.7
Mining	.2	3.3		
Manufacturing & Mech. Industry	19.2	32.9	1.5	22.6
Transportation	2.5	8.6	.2	2.6
Trade	8.6	10.8	8.8	7.8
Public Service	1.5	2.3		.3
Professional Service	36.3	3.4	48.1	11.9
Domestic and Personal Service	.3	3.7	2.1	25.6
Clerical	4.9	5.1	28.9	16.7
Undecided	13.3		10.2	

Table II should be read thus: According to the census reports of 1920, the percentage of males over ten years of age gainfully occupied in "Agriculture" was 29.8; of the total number of boys in the group studied, 12.2 per cent chose this line of work; etc.

A study of Table II will again show that agriculture, mining, manufacturing, etc., are far under their quota, and that the only division of occupations that is greatly over-supplied is professional service.

Although the disproportion between supply and demand is somewhat less in the case of agriculture and manufacturing than was found to be the case on the first basis of comparison, the over-supply in the professions is seen to be even greater. Where before a ratio of eight to one of supply to demand appeared in the case of the males, a ratio of ten to one is now shown. The "white collar complex" is quite evident here. On this basis, only one boy in ten who has chosen the professions will be able to reach his ambitions.

The comparison between the percentage of girls choosing the various kinds of work and the percentage of women actually engaged in them, is

also interesting and significant. Although eighty per cent of the girls will eventually become housewives, among the 618 girls studied only eight were found who intended to become home-makers, and only one was found who intended to become a cook. This fact should be discounted, however. No doubt many girls, although they really look forward to home-making as their eventual occupation, nevertheless indicated as their choice the work which they planned to take up immediately after leaving school.

Since the occupations followed by most women, with the exception of home-making, are quite transitory, too much importance should not be attached to the figures shown in Table II. A great many girls who choose teaching, nursing, clerical work, etc., will be occupied in those lines of work for only a few years and will eventually become housewives. The disproportion in the case of the girls, therefore, is not so serious as it might at first appear to be.

Although the over-supply in professional work is less in the case of girls than it is in the case of boys, it can hardly be said that the girls have chosen their vocations any more wisely. Here again agriculture, manufacturing, and personal service are found to be greately under-supplied, while professional service and clerical occupations are greatly over-supplied. The ratio of supply to demand is one to sixty-three in the case of agriculture, one to fifteen in manufacturing, and one to twelve in domestic and personal service. On the other hand, the over-supply exceeds four to one in the professions, and is about two to one in clerical occupations.

When compared on the basis of sex, it can readily be seen that the disproportion between vocational interests and vocational opportunities is even greater than it appeared to be on the first basis of comparison.

Vocational Opportunities in California

It has been shown that, when the vocational trends found in this study are compared with the vocational opportunities within the United States on the basis of the total number of persons gainfully occupied, a great discrepancy is found to exist. It has also been shown that, when these trends are compared with the percentage of people gainfully occupied by sex, the disproportion between supply and demand in the case of males, at least, becomes still greater.

Thus far in the study, however, it has been assumed that the opportunities in the various lines of work may be gauged by the number of persons now gainfully employed in the United States as a whole. It has also been assumed that these opportunities are approximately the same today as they were in 1920, and that they will continue to be approximately the same for some time in the future.

Neither of these assumptions is strictly correct. From an examination of Figure 2, in which a comparison of the census figures for 1910 and for 1920 are presented, it can be seen that the percentage of people engaged in agriculture has dropped from 33 per cent to 26 per cent in the ten-year period. On the other hand, the percentage of people engaged in manufacturing has increased in almost the same ratio. The decrease in agriculture may be partly explained by the fact that the census of 1910

was taken in the summer when the maximum of workers were occupied in that work, whereas the census of 1920 was taken in the winter when the minimum of workers were so engaged.

Nevertheless, it must be admitted that the number of people engaged in agriculture in the United States is decreasing to some extent. The number of people needed for the production of raw material is becoming smaller, while the number of people engaged in manufacturing that raw material into finished products, is undoubtedly increasing. At the present time there may be too many people engaged in farming. Certainly there are too many marginal producers so engaged. But food and raw material must be produced, and the percentage of the population of the United States engaged in agriculture will probably continue to be high.

Although the vocational interests of high school students may be said to be following the trend in agriculture, they are not following the present development in manufacturing. This, in fact, is one of the lines of work that is far under-supplied.

On the whole, a study of the census reports over a period of years shows that the proportion of the population engaged in the different divisions of occupations has remained more or less constant in the past, and, except for an increase in manufacturing and a corresponding decrease in agriculture, it will probably remain more or less constant in the near future. The percentage of people engaged in the skilled trades and in the professions has remained almost the same from decade to decade, and probably it will not change to any great extent. The apparent increase in the percentage of the population engaged in professional service is due largely to the transfer of certain occupations to this division in the classification which was used for the compilation of the census reports for 1920. The professions will be considered in detail further on in the present study.

The census reports of 1920 will be considered, therefore, as a sufficiently reliable index for the study of vocational opportunities.

The assumption that vocational opportunities can be accurately determined on the basis of the number of people employed in the United States as a whole, is not strictly correct. This assumption is not true, at least, for the group of California high school students now under consideration. The population of the United States is more or less homogeneous, and it will probably become more so. It is also highly mobile. But it may safely be assumed that the migration in the group now under consideration will be greater within the State of California than from state to state. Probably a small percentage only of this group of students will leave the State of California, although considerable migration may be expected within the state.

Assuming this conclusion to be true, the census figures for the State of California would be a more reliable index of the occupational opportunities open to this group than the figures for the United States as a whole.

A further study of the problem justifies this conclusion. Of the students who were studied, only 27.8 per cent were born in the com-

munities in which they were then living, while 72.2 per cent were born elsewhere. Of the number born elsewhere, a large proportion were born in the State of California.

A study was also made of the nativity of the fathers of these students. It was found that 29.9 per cent were born in California, 40.5 were born outside the state but within the United States, while 29.6 per cent were born in foreign countries.

It was found that the number of places each student had lived, including the place he was then living, averaged 2.7. This would indicate that the average family living in the rural districts of California moves from one community to another on an average of once every five or six years. As compared with the urban population, this figure is undoubtedly low. Most of the families included in this study were living on farms which they owned themselves. The rural population included in the present study may be considered, therefore, as relatively stable.

In view of this fact, the following conclusions are justified: (1) the migration in the case of the young people now being studied will be principally within the State of California; and (2) the census reports for the State of California are a more reliable index of vocational opportunities for them than are the census figures for the United States as a whole.

TABLE III PER CENT DISTRIBUTION BY SEX. VOCATIONAL TRENDS COMPARED TO U.S. CENSUS REPORTS FOR CALIFORNIA, 1920

GENERAL DIVISION OF OCCUPATIONS	MALE		FEMALE	
	SCHOOL	CENSUS	SCHOOL	CENSUS
Agriculture, Forestry, Animal Husbandry	12.2	21.4	.2	3.5
Extraction of Minerals	.2	2.0		
Manufacturing and Mechanical Industry	19.2	31.7	1.5	14.5
Transportation	2.5	9.4	.2	3.4
Trade	9.6	14.1	7.8	12.5
Public Service (not elsewhere classified)	1.5	3.6		.4
Professional Service	36.3	5.3	48.1	18.0
Domestic and Personal Service	.3	6.4	2.1	26.7
Clerical Occupations	4.9	6.0	30.0	21.0
Undecided	13.3		10.2	

Table III should be read thus: Of the total number of boys included in the present study, 12.2 per cent chose agriculture, forestry, and animal husbandry, whereas according to the census of 1920, 21.4 per cent of the males of California, ten years of age and older who were gainfully occupied, were engaged in that line of work; etc.

The analysis will, therefore, be carried a step further.

Table III makes a comparison by sex between the vocational trends found among the 1211 high school students studied, and the percentage of people in the State of California actually engaged in the divisions of occupations represented according to the census reports for 1920.

Although the discrepancies between supply and demand are not as great as appeared when compared to the census reports for the United States as a whole, even here no apparent relation between the number of boys and girls choosing an occupation and the number actually needed in it is to be discovered. In the case of the boys, the ratio of supply to demand in professional service has dropped from 10 to 1 to about 7 to 1. The ratio for girls in this occupational group has also dropped to some extent.

On the whole, although there is some improvement in the professional group, there still remains a large over-supply in professional service, and a corresponding under-supply in the other divisions of occupations.

Vocational Opportunities Within the Community

If the vocational interests of rural high school boys and girls are more nearly in agreement with the vocational demands of the state than they are with those of the nation, it is reasonable to expect that they will also be found to be in still greater agreement with the occupational interests of the community in which they live.

Since there are no census figures available for most of the rural communities studied, it was decided to take the occupations of the fathers of these students as the best available index of the vocational interests of the communities in which they were living. The vocational opportunities open to this group can be more accurately gauged through a study of the occupations of the fathers, perhaps, than through any other method.

In the present study the vocational interests of the boys are of far more concern than are those of the girls; for upon the boys, within the space of a few years, will fall the responsibility of the support of a family. The vocational interests of the girls, as has been previously pointed out, are more or less transitory in nature. Although important, the vocational guidance problem for the girls is not so vital and pressing as in the case of the boys.

The study at this point will, therefore, be confined to a comparison of the occupations chosen by the boys with those in which their fathers are now engaged.

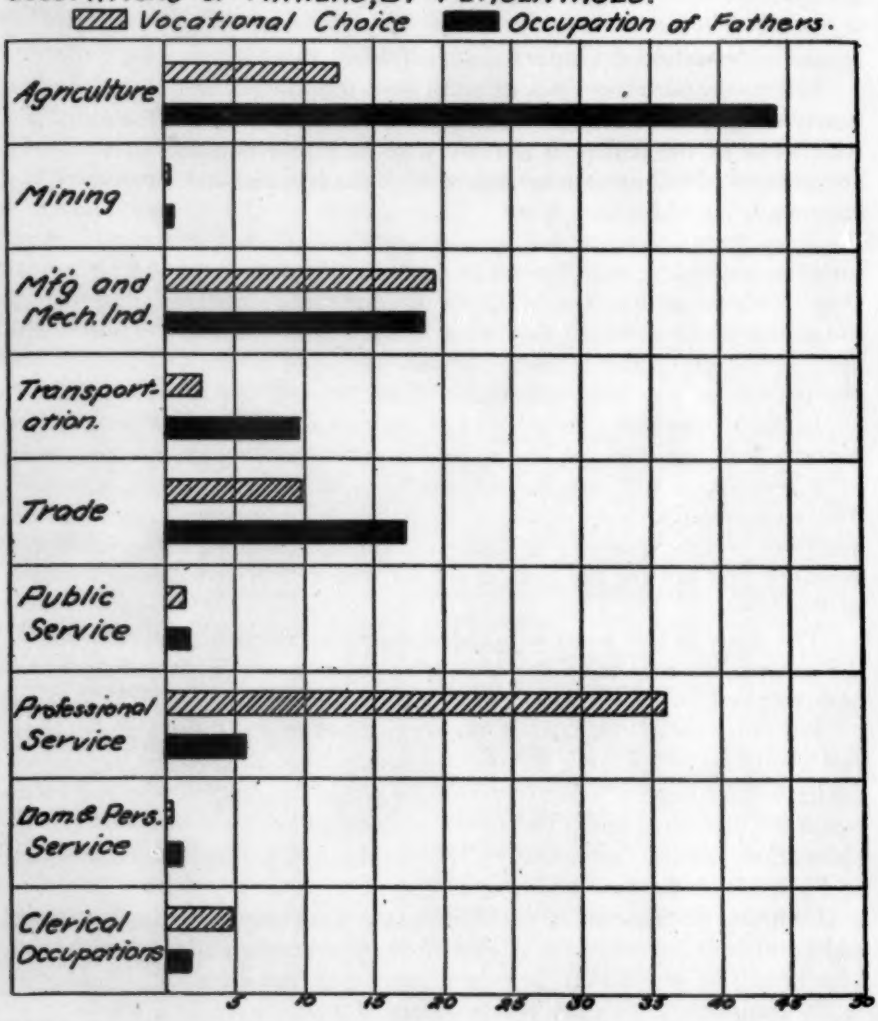
For purposes of comparison, the occupations of the fathers were classified according to the large divisions of occupations as given in the United States census reports. The percentages found in each group were then computed and were compared to the percentage of boys who had chosen occupations within that group. The results are graphically represented in Figure 3, on the following page.

Contrary to expectation, the disproportion between vocational interests and vocational opportunities as measured by this, our most accurate basis of comparison, is found to be even greater than was shown to be the case in the comparison with the census figures for the State as a whole.

The ratio of supply to demand has changed for the worse. In agriculture, instead of one to two, it now becomes one to three. These figures become more significant when it is realized that the boys in the group being studied are practically all the sons of farmers. Evidently the ranks of agriculture are not going to be recruited from the group of boys here represented. The dominant vocational interests of the community do not seem to influence the vocational interests of farm boys to any great extent.

If the number of fathers who are now really engaged in farming, but who were reported as carpenters, mechanics, professional workers, etc., were added to the agricultural group, the ratio would be considerably higher than it here appears. This would operate to increase the percentage shown in agriculture and to decrease correspondingly the percentage shown

FIGURE 3 VOCATIONAL CHOICES OF BOYS COMPARED TO OCCUPATIONS OF FATHERS, BY PERCENTAGES.



The graph should be read as follows: Of the total number of boys studied, about 12 per cent chose agriculture as their future vocation, whereas, of the total number of fathers of this same group of boys, 44 per cent were so engaged; etc.

in other groups. Instead of a slight over-supply in manufacturing, there would undoubtedly be found an actual under-supply.

It will be observed that there are about four times as many fathers engaged in transportation as there are boys interested in it. In one community studied in which fifty-three fathers were engaged in this line of work, not one boy was found who had chosen it. In still another community, not a single boy was found to have chosen agriculture.

A further study of Figure 3 shows that both public service and domestic service are also under-supplied. Clerical occupations, although under-supplied on the basis of the needs of the State, shows a local over-supply (4.9 per cent) two times greater than the demand (1.8).

The most striking disproportion is again found in professional service. The percentage of fathers engaged in this line of work is very close to the percentage for the United States as a whole—5.7 compared to 5.2. The percentage of boys choosing this line of work, however, is seven times as great.

Supply and Demand in the Professions

The professional group is worthy of further study and analysis.

As was previously mentioned, the ratio of doctors, lawyers, teachers, etc., to the total population remains more or less constant throughout the country and remains practically the same from decade to decade. A study of the census reports for 1920 shows that for each 729 people in the general population of the United States there was one doctor; for each 863, one lawyer; for each 1883, one dentist; for each 830, one minister; for each 1339, one druggist; for each 777, one engineer; for each 377, one trained nurse; and for each 138, one teacher.

In an unselected group picked at random from the general population, the ratios would be found to be approximately as shown above. Thus, in a group of 729 people picked at random, only one doctor would normally be found; in a group of 863 people thus selected, only one lawyer would be expected, etc.

Now, if the group of 1211 boys and girls studied were an unselected group picked at random from the general population, the number of boys and girls who would be expected to find places in the professions could be determined by dividing the population per member for each profession into the total number in the group. This would give the ratio for the group in respect to each of the professions. The result is shown in Table IV.

TABLE IV

NORMAL EXPECTANCY IN RESPECT TO THE PROFESSIONS OF AN UNSELECTED GROUP OF 1211 PEOPLE COMPARED TO THE NUMBER CHOOSING THOSE PROFESSIONS AMONG A GROUP OF RURAL HIGH SCHOOL STUDENTS OF THE SAME SIZE

Profession	*No. Per Member in Total Population*	*No. Expected in Unselected Group*	*No. Found in H.S. Group*
Medicine	729	1.7	9
Law	863	1.4	16
Dentistry	1883	.6	3
Ministry	830	1.5	3
Pharmacy	1319	.9	17
Engineering	777	1.6	66
Nursing	377	3.3	63
Teaching	138	8.8	196
Totals		19.8	373

Read the above table thus: For every member of the medical profession, there are 729 people in the general population of the United States according to the census of 1920; on this basis the number of doctors expected to be found in an unselected group of 1211 people is 1.7; the number of students found in a group of this size who had chosen medicine was 9; etc.

Table IV shows that the total number from the eight professions named, normally expected to be found in an unselected group of 1211 people, would be 19.8. The total number of students who had chosen these professions in a group of the same size was found to be 373. In other words, for every opening in the professions studied, assuming this to be an unselected group, there are 19.3 young people who hope to fill it!

It is manifestly absurd to suppose that a group of 1211 rural high school students found in twelve high schools picked at random in the State of California could possibly represent a group nineteen times as select as a group of boys and girls 14 to 17 years of age picked at random from the general population of the United States. The conclusion is obvious.

It may be said that the vocational choices of boys and girls of high school age really do not mean anything, that they change from day to day, and that they are therefore of little importance. Investigations which have been made of the permanency of vocational interests among high school students indicate the fact that such is not the case. It has been found that they do persist from year to year, and that they are of far greater significance than has generally been supposed.[4] Nearly half the students in the senior year in high school retain the same vocational choice which they had as freshmen.[5]

The Criteria Compared. In order to compare the results of the preceding studies of vocational supply and demand as measured by the various criteria which have thus far been applied, the ratios of the percentage of supply to the percentage of demand, in the case of the boys, are set forth in Table V. The ratios are obtained by dividing the percentage of males

TABLE V

VOCATIONAL SUPPLY AND DEMAND SHOWN BY RATIOS FOR THE UNITED STATES, FOR CALIFORNIA, AND FOR THE TWELVE COMMUNITIES STUDIED

Divisions Of Occupations	Ratios		
	United States	*California*	*Local*
Agriculture	.41	.57	.27
Mining	.06	.10	.28
Manufacturing	.58	.60	1.06
Transportation	.29	.26	.25
Trade	.89	.61	.54
Public Service	.65	.42	.88
Professional Service	10.67	6.85	6.37
Dom. and Pers. Service	.08	.05	.30
Clerical	.96	.71	2.72

The above table may be read thus: The ratio of the percentage of students choosing Agriculture to the percentage of people occupied in that line of work in the United States as a whole is .41 to 1; compared to the percentage of people so engaged in California, the ratio is .57 to 1; while compared to the percentage of people occupied in the local community in which these boys live, the ratio is .27 to 1; etc.

The percentages used were for males.

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[4] Proctor, W M., *Educational and Vocational Guidance,* p. 67. Houghton Mifflin Company, 1925.

[5] Schmidt, H. W., A Brief Investigation of Vocational Trends Among High School Students in Wisconsin. *Industrial Arts Magazine,* Vol. XII, No. 6, p. 220, June, 1923.

gainfully occupied in each line of work, according to the three respective criteria used, into the percentage of boys who have chosen those occupations in the group studied. The larger the ratio, therefore, the greater the over-supply, and the smaller the ratio, the greater the under-supply. When the vocational interests and the vocational opportunities are perfectly balanced, the ratio is one.

A study of Table V will show that, measured by the three criteria used in this study, the vocational choices of rural high school boys bear no relation to the vocational opportunities open to them.

TABLE VI. PER CENT DISTRIBUTION IN VOCATIONAL TRENDS, BY SCHOOLS

GEN'L. DIV. OF OCCUPATIONS	SCHOOL											
	No. 1.	No 2	No 3	No 4	No 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12
Agriculture	4.0	2.8	12.7	13.0	8.1	10.4	6.0	3.0	9.2	9.7	2.0	
Mining							.8					
Mfg and Mech. Ind.	8.0	10.2	11.3	5.2	6.4	11.9	13.8	9.1	13.8	11.6	8.1	12.0
Transportation	2.0	2.8	1.4		1.6			1.5		.9	.7	4.3
Trade	4.7	13.6	2.8	14.3	3.2	13.4	11.3	9.1	11.0	8.7	5.4	5.4
Public Service	.6	.6				1.5	.8	1.5				4.3
Professional Service	40.6	29.9	46.5	31.2	56.5	40.4	38.0	45.5	35.8	50.0	55.7	43.6
Dom.& Pers. Service	1.4	1.3	1.4	2.6		1.5	1.6		.9	.9	2.0	
Clerical Occupations	20.0	25.2	14.1	14.2	12.9	11.9	16.5	19.7	22.9	12.5	17.4	16.3
Undecided	18.7	13.6	9.8	19.5	11.3	9.0	11.2	10.6	6.4	5.7	8.7	14.1

The Range in Vocational Interests

The Distribution Found in the Schools. Table VI shows the total distribution in vocational interests among the various schools studied, including both boys and girls. It should be read thus: The percentage of the total number of students studied in school No. 1 who chose agriculture was 4.0; in school No. 2, it was 2.8; etc. Where no percentages are shown, no students were found in the school who had chosen that line of work. (*For Table VI, see page* 291).

The striking thing to be observed in Table VI is the surprising uniformity in the central tendencies. The same disproportion between vocational interests and vocational opportunities persists throughout all the schools surveyed.

As an illustration of the very limited range in vocational interests which was found, a comparison is made in Table VII between the vocational trends which were found in the first school studied, and the averages for the entire group.

TABLE VII

VOCATIONAL TRENDS IN A TYPICAL SCHOOL COMPARED TO AVERAGES FOR THE TWELVE RURAL HIGH SCHOOLS STUDIED, BY PERCENTAGES

DIVISION OF OCCUPATIONS	*Typical School*	*Average of Twelve*
Agriculture	4.0	6.0
Mining	.0	.1
Manufacturing	8.0	10.0
Transportation	2.0	1.3
Trade	4.7	8.8
Public Service	.6	.7
Professional Service	40.6	42.4
Domestic and Personal Service	1.4	1.1
Clerical Occupations	20.0	17.8

The above table should be read thus: Of the total number of students in a typical school, 4.0 per cent chose agriculture, whereas the average percentage choosing this line of work in the twelve schools studied was 6.0; etc.

It will be observed that transportation, public service, and domestic service are very poorly represented. The percentage of students choosing agriculture is small, but more or less constant. Professional service claims an excessive proportion in every case.

The largest range is found in agriculture (0 per cent to 15.0 per cent). The number of cases in mining, public service, and domestic service is too small to arrive at any general conclusions. There are, however, a sufficient number of cases included in professional service to furnish a fairly reliable measure of the variability (29.9 per cent to 56.5 per cent).

Considering the wide range of differences in the curricula offered, in school practices and policies, and in the character of the communities represented, the range is less than would be expected. Wherever wide deviations from the central tendency exist, further study will no doubt show them to be due to local conditions.

TABLE VIII. RANGE IN VOCATIONAL TRENDS AMONG SCHOOLS BY PERCENTAGES.

GENERAL DIVISION OF OCCUPATIONS	MINIMUM	MAXIMUM	AVERAGE
Agriculture	0	13.0	6.0
Mining	0	.8	.1
Manufacturing & Mech. Industry	5.2	13.8	10.0
Transportation	0	4.3	1.3
Trade	2.8	14.3	8.8
Public Service	0	4.3	.7
Professional Service	29.9	56.5	42.4
Domestic and Personal Service	.0	2.6	1.1
Clerical	12.5	25.2	17.8
Undecided	5.7	19.5	11.8

The range of choice found among the twelve schools is shown in detail in Table VIII. This table should be read thus: Among the twelve high schools studied, the minimum percentage of students choosing agriculture was zero, while the maximum percentage choosing this line of work in any one school was 13.0; the average percentage choosing this line of work among all the schools was 6.0; etc. The percentages given include both males and females.

Vocational Trends Studied in Detail

The range of occupations chosen by the group of 1211 rural high school students studied is shown below. The specific vocations chosen are listed in order of frequency:

Teacher, 196; stenographer, 146; mechanic, 74; farmer, 69; commercial, 67; engineer, 66; nurse, 63; aviator, 51; bookkeeper, 37; clerical, 25; artist, 24; musician, 21; druggist, 17; lawyer, 16; carpenter, 15; journalist, 14; architect, 13; draftsman, 12; salesman, 9; interior decorator, 9; housewife, 8; seamstress, 8; physician, 8; trucking, 7; actor, 6; civil service, 6; radio operator, 5; printer, 4; librarian, 4; beauty specialist, 4; baseball player, 4; sailor, 3; minister, 3; dentist, 3; chemist, 3; forester, 2; professional dancer, 2; hotel proprietor, 2; plumber, 2; ranger, 2; author, policeman, wood-worker, canner, detective, cook, golf professional, geologist, banker, hygienist, milliner, miner, navy purser, plasterer, tea-room proprietor, taxidermist, 1 each.

In most cases the same disproportion between vocational interests and vocational opportunity is found when the vocational trends are studied in detail as was found when they were studied by large general divisions.

The most striking example is found in the case of "teacher." In spite of the fact that the teaching profession is now over-supplied, the number of students who chose teaching (196) is by far the largest group of all. According to the findings of a scientific study of supply and demand in the teaching profession recently made by Miss Ruth Eakin, Assistant Chief of the Division of Teacher Training and Certification, Department of Education, California, there was an excess of supply over demand of 3376 teachers in California for the school year of 1926-1927. The excess for the present year (1928-1929) has been estimated by Mr. S. M. Chaney, Manager of the Division of Placement, California Teachers Association, as approximately 5000 teachers. When it is considered that the teachers colleges of this state are turning out each year hundreds of teachers, and that the surplus of teachers, therefore, becomes greater from year to year, the real gravity of this situation can be better understood and appreciated.

Conditions Indicated in City High Schools. It may be said that, although the conditions found in this study may be true for the particular class of rural high schools surveyed, yet the conditions in the large city high schools are entirely different. On the contrary, an investigation made of two large city high schools would seem to indicate that, if anything, the conditions in the city high schools of California are even more aggravated than they are in the rural high schools. In both of the city high schools investigated, it was found that approximately fifty per cent of the students had chosen professional work, compared to 42.4 for the rural high schools we are now studying.

In short, every indication seems to point to the conclusion that conditions in the city high schools of California, and, in fact, throughout the United States, are not very different from those discovered to exist in the twelve rural high schools included in this study.[6]

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[6] Counts, George S., *The Senior High School Curriculum*, p. 147. Chicago University Press, 1926.

The concluding chapters of this survey will be published in the October number of THE QUARTERLY. *The titles of these chapters are:*

Vocational Interests and the High School Program.

Other Determining Factors in Vocational Choice.

Vocational Choice in Relation to Capacity.

Distribution in Choice of Courses of Study.

Subject Matter Interests of High School Students.—EDITOR'S NOTE.

APPENDIX
VOCATIONAL ANALYSIS QUESTIONNAIRE

Department of Education, State of California
(Approved by Division of Research and Statistics)

WALTER E. MORGAN, *Chief*

I. PERSONAL DATA.

1. Name
2. Address
   Grade
3. Date and place of birth
4. Father's or Guardian's name
   Place of birth
5. Father's occupation
   Father living?
6. Mother's name
   Place of birth.
7. Mother's occupation (if outside of home)
   Mother living?
8. Places lived.

II. EDUCATION.

1. School attended before this
2. Do you have any special occupational training (typing, trade, house-work, care of children, waiting tables, etc.)?
3. What study do you like best?
4. What study do you dislike most?
5. Do you plan to finish high school? To go to college?
6. Check course you are taking:

Commercial	Homemaking	College Preparatory
Vocational	Agriculture	General Course

7. What are your favorite books and magazines?
8. Do you speak any language other than English? What?
9. What school activities do you take part in?
10. What clubs or other organizations outside of school do you take part in?
11. What do you like to do most when you have spare time?

III. VOCATIONAL AMBITION.

1. Previous employment
   Name of firm; length of service; kind of work; wages
2. Of the work you have done, which do you prefer?
3. Are you handy with tools? Do you like to work with tools?
4. Have you any special skill or ability (singing, drawing, figuring, sewing, cooking)?
5. Do you save a part of the money you earn?
6. What line of work do you intend to follow after leaving school?
   First Choice Second Choice
7. Why?
8. Do you know the training requirements for this work?
9. What led you to choose the occupation for which you are preparing? Check any of the reasons quoted below:
   a. Advice of parents, teachers, friends?
   b. Success of others?
   c. Belief in your personal qualifications?
   d. Experience in that line of work?

SIX YEARS' PROGRESS — THE PRESENT STATUS OF COUNSELING IN THE HIGH SCHOOLS OF CALIFORNIA

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Basis of Study

SIX years ago, in 1923, the California High School Teachers' Association undertook a self-survey of the secondary schools of the state. For this purpose there was appointed the Committe of Fifteen, individual members of which investigated respective phases of the work. One of the problems considered was that of educational and vocational guidance, the results of the study being incorporated in the general report of the Committee which was published at that time.[1]

If the guidance of adolescent youth constitutes a major function of the high school—and we have written that principle indelibly into our educational philosophy of today—then six years should show definite progress in the direction of more efficient service and more tangible results. What has actually been true in the development of the movement can be answered only by a comparative study based upon data covering the same items which were investigated in 1923. This was done in a survey recently completed. The same questionnaire which was used by the Committee of Fifteen was again sent to the principals of all high schools of the state, with the exception of those having fewer than 50 pupils enrolled. So great was the cooperation of the principals that it was possible to base the findings on 262 questionnaire returns,—a number which represents almost 80 per cent of all schools to which it was sent.

There are manifest reasons why any survey of high school conditions of the state must recognize the wide differences in size existing among the schools. A school of 200 pupils cannot be considered on the same basis as one of 1500. For this reason all high schools responding to the questionnaire were classified according to enrollment into the following three groups: (1) 50-199; (2) 200-499; (3) 500 and above. Table I shows that the numbers and percentages of each group included in the study are closely similar, so that no one group is represented in undue proportion.

Signs of Progress

The major items involved in a high school counseling plan were listed in the questionnaire, and the principal was asked to indicate for each item whether or not it was included in his own school program. It is not possible to differentiate in such an objective study the varying degrees of development which have taken place in a particular activity; in one school it may be in its most embryonic stage, while in another there may be a highly organized plan which functions to a supreme degree of efficiency.

[1] Dr. W. M. Proctor contributed that section of the report which dealt with the problem of guidance, and which furnished the basis for the technique of the present study.

The comparative data given in Table II include all reports made by principals which indicated that the factor named was present in his school, in whatever stage of development. The same method of tabulation was used in the 1923 study, so that the figures here given are comparable.

An examination of Table II shows us what we should expect,—a material increase in the percentages of schools carrying on or attempting to carry on specific counseling functions. The term "pre-guidance," which is the first item of the table, refers to such preliminary counseling as is given to eighth grade or (in the junior high school) to ninth grade pupils, looking toward proper orientation in the high school. It is a rather surprising fact that the growth in this respect seems to be limited to the small schools, since both the two larger groups show a decrease in the percentage reporting such pre-guidance. This may be due to the fact

TABLE I

SCHOOLS INCLUDED IN STUDY

(Classified according to size)

Enrollment	*No. of Schools and % Reporting*		
	Total No. in State	*No. Reporting*	*% Reporting*
50-199	116	85	73.3
200-499	103	76	73.8
500 +	118	101	85.6
All schools	337	262	77.7

Read the table as follows: Of the 116 high schools in the state having an enrollment of 50 to 199 pupils, 85, or 73.3 per cent are included in this study. Of the 103 schools having an enrollment from 200 to 499 pupils, 76, or 73.8 per cent, are included. Read similarly for the large schools and for the total number of schools.

TABLE II

SUMMARY OF COMPARATIVE DATA FOR 1923 AND 1929

(Giving percentages only)

	Percentage of All Schools Reporting							
	All Groups		*Small*		*Medium*		*Large*	
	1923 %	1929 %	1923 %	1929 %	1923 %	1929 %	1923 %	1929 %
Pre-guidance	56.1	66.4	37.8	45.9	77.7	68.4	89.7	82.2
Organized educational guidance	80.2	87.4	71.8	72.9	86.6	89.5	94.8	98.0
Classification	64.2	84.0	57.2	65.5	71.1	89.5	76.9	94.1
Counsel for educational future	94.1	93.9	95.1	95.3	88.8	93.4	100.0	93.0
Organized vocational guidance	60.2	59.5	41.7	43.5	53.3	59.2	69.2	73.3
Life career classes	29.7	38.5	20.3	40.0	35.6	42.1	43.6	34.6
Placement bureau	22.0	34.7	10.7	9.4	17.8	21.1	56.4	66.3
Follow-up of graduates	25.2	36.2	16.5	18.8	29.9	31.6	43.6	54.4
Use of tests in vocational guidance	19.3	40.1	12.7	35.3	22.3	46.1	33.4	39.6
Special counselor	18.2	37.0	5.9	5.9	26.7	31.6	41.0	67.3

Read the table as follows: Of the total number of schools reporting in 1923, 56.1 per cent indicated that some type of "pre-guidance" was given to pupils before coming to high school. In 1929, 66.4 per cent of the 262 reporting indicated such "pre-guidance". For the small school the percentages were, in 1923 and 1929 respectively, 37.8 and 45.9. Read similarly for other groups of schools, and for other items of the table.

that the large schools reported to a very much greater extent in the present study than in 1923,[2] and it is reasonable to suppose that the least progressive schools were the ones which failed to report in the earlier study.

If this is true, the inclusion of such schools in the findings would have made the percentages materially lower in 1923 than they appear at face value. The same reason may account for the decrease among the large schools from 100 per cent to 93 per cent for the item of "counsel for educational future." The third and last item in which the large schools appear to have been retrogressive rather than progressive is in the organization of "life career classes." Here there is likely to be an additional factor operative, namely, the fact that in over three-fourths of the schools in question such classes are conducted in the ninth year. When one considers that junior high schools have made their greatest growth in districts where large senior high schools exist, it is logical to conclude that these junior high schools have taken over the life career classes together with other phases of ninth grade work, leaving no report on this item to be made by the senior high school.

Among the most significant signs of progress is the increase in the number of schools in which there has been appointed a special counselor (or a staff of counselors) responsible for leadership in the guidance program of the school. What is everybody's business is likely to be nobody's business, and, unless there is some one person—or persons—whose specific responsibility it is to be or to become a leader and a specialist in guidance activities, the program is likely to be marked by haphazard methods, inaccurate information, and results that are sometimes more harmful than beneficial. That school administrators are increasingly recognizing the truth of this statement is shown by the fact that, in the large high schools of the state, the percentage having specially appointed counselors has increased from 41.0 to 67.3 per cent; in the schools of medium size there has likewise been an increase from 26.7 to 31.6 per cent. The small schools have apparently remained static in this respect, the per cent being the same (5.9) at the time of both studies.

There is a very real reason for this situation in the small school. The city school system, with its large staff and ample facilities, finds it a comparatively simple matter to organize its counseling functions about a group of counseling specialists. The small school, on the other hand, even when it has qualified teachers who might be appointed to such service, has a much more difficult task to release them from classroom teaching duties for the specialized assignment of guidance. Again and again the principals expressed as one of their greatest problems the lack of adequate time for counseling activities. The campaign, therefore, must be one of steady pressure upon the need of the work and upon the value of its results, so that local boards of education will be willing to make greater provision for it.

Another phase of the work in which there has been signal progress is in the classification of pupils for purposes of instruction. The percentage of schools in which such classification is carried on has increased from 64.2 per cent in 1923 to 84.0 per cent in 1929. The large schools again

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[2] In 1923 only 39 large schools, enrolling 500 or more pupils, sent in a report, as compared with 101 which reported in 1929.

show the highest frequency of this item, 94.1 per cent of them reporting some form of classification. But even the small schools are making a definite effort to adjust the curriculum to individual needs of pupils, for we find 65.5 per cent of them indicating that classification is carried on by some means or other. In this connection it must be remembered that classification need not be identical with the organization of separate sections. This would be impossible in many schools where separate sections of the same grade of work cannot be formed for lack of numbers. It is conceivable that within a group of ten or twenty pupils there may be just as real classification for instructional purposes as there is in a group of one hundred pupils who have been separated into more or less homogeneous groups. Perhaps the term "classification" should give way to the term "adjustment" or "differentiation" of the curriculum to meet individual differences, whether such differentiation come by way of separate sections, by individual instruction, or any other means.

One other item of Table II needs special comment; i. e., that of the "use of tests in vocational guidance." It will be noted that the number of schools represented here has increased from 19.3 per cent to 40.1 per cent. This does not mean that 40 per cent of the schools are making a comprehensive use of all types of tests suitable for vocational guidance; the program here is in most cases restricted to a rather general application of the results of intelligence tests only, in so far as such tests are applicable in the field of vocational counseling. A few schools report the use of mechanical aptitude tests, tests of musical aptitude, etc. However, avenues of development in this respect are still wide open, not only in the use of such tests as are available, but also in the construction of instruments of measurement which will be of practical value.

There is no doubt that some of the things which the schools say they are doing, as listed in Table II, are only being touched upon in most sporadic fashion. There is no doubt that some of the specially appointed "counselors" are attempting to put over a program for which they are but poorly prepared, for which they have inadequate time, and in which they are securing but meagre results. Principals and counselors alike would be among the first to recognize the weakness of their efforts. But there is likewise no doubt that counseling activities have taken on an added significance in the thinking and planning of school people throughout the state. With real interest in the work and appreciation of its value, with initiative to attack the problem, and with adequate provision for its administration, much has been accomplished. From northern to southern boundary of the state there is an increasing recognition of the fact that the most important factor of secondary education is centered about pupil needs and pupil adjustment.

Organization of Educational Guidance

When we inquire into the methods of organizing service for guidance, we find, as has been indicated, every degree of efficiency, varying from the loosest, vaguest sort of organization to the highest type of systematic control. Table III indicates how the responsibility of counseling is distributed among various officials of the school, both as to pre-guidance in

the elementary or junior high school and as to educational guidance in the high school itself. In the small schools the principal, assisted by class teachers, is the dominant force in the program; but as the size of the school increases, the responsibility is more likely to be placed in the hands of appointed counselors, or of vice-principals or deans who take on the duties of counselors in addition to their administrative functions.

Division of the responsibility need not be detrimental to the value of results, provided there is a definite, coordinated, systematized plan which will take care of the service completely, yet without duplication. In fact, even where there is provision for a special counselor, this should by no means relieve the class teachers or the advisory teachers of all responsibility for studying and knowing their pupils. On the contrary, they should be alert to every incipient problem of maladjustment occurring in their classes, as well as to early indications of special ability or interests. In their daily contact with the pupils they may be the first to recognize the symptoms of health difficulties or other personal problems which should be reported to the counselor for special attention. Only thus can the best results be secured from the combined, cooperative efforts of counselor and teachers.

TABLE III

ORGANIZATION OF EDUCATIONAL GUIDANCE

	No. and % of Schools							
	All Schools		*Small*		*Medium*		*Large*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
1. *Pre-guidance*								
No. reporting	174		39		52		83	
Administered by:								
(a) Ele. (or J.H.S.) prin.-supt.	71	40.8	26	66.7	24	46.1	21	25.3
(b) Spec. counselor	55	31.6	0	0.0	4	7.7	51	61.4
(c) High sch. prin.	50	28.7	14	35.9	21	40.4	15	18.0
(d) Ele. (or J.H.S.) teachers	37	21.4	6	15.4	16	30.8	15	18.0
(e) Co. supervisor	1	0.6	1	2.6	0	0.0	0	0.0
2. *Org. educ. guidance in high school.*								
No. reporting	229		62		68		99	
Administered by:								
(a) Principal	139	60.7	48	75.8	47	69.1	44	44.4
(b) Vice-prin. or dean	87	37.9	6	9.7	26	38.2	55	55.5
(c) Class advisers	83	36.2	19	30.6	32	47.1	32	32.3
(d) Spec. counselor	68	29.7	1	1.6	8	11.8	59	59.5
(e) Faculty committee	7	3.1	0	0.0	4	5.9	3	3.0

Read the table as follows: Of the 174 schools which reported "pre-guidance" of some type, 71, or 40.8 per cent, indicated that it was administered by the elementary (or junior high) principal or district superintendent; 55, or 31.6 per cent, indicated a special counselor; etc. Read similarly for other items of the table and for each group of schools. Note that several persons frequently share the responsibility of the guidance program in the same school.

In the small school the problem of adequate organization is a heavy one, though, as one principal expressed it, "a small school has some advantages. One of them is that it is possible for the principal to know each individual, and the families and background of most of them." Yet even the small school, with its intimate knowledge of its pupils, needs some definite plan of organized guidance. The principal referred to above states

further that "in recent years, under the direction of the county superintendent of schools, the eighth grade teachers of the grammar schools in this union district have sent us a report of each graduate, based on mental tests, actual school achievement, and personal opinion and notes of the grade teachers. My Vice-principal and I have gone over these reports carefully before the fall registration, and have classified the students,—especially in algebra, English, and ancient history, where the total registration justifies dividing the class into sections." Such classification is continued into the tenth and eleventh years, separate sections being organized when enrollment permits.

The part which the county superintendent's office plays in the counseling program of this union district is one which might well be suggestive to other small schools of the state. Such service could be further developed by the employment of a guidance specialist working from the county superintendent's office and dividing his time among the schools of the district in order to advise and to lead them in their counseling functions.

Classification of Pupils

The *fact* of classification has already been discussed. The *bases* of classification, the *methods,* and other details of its operation are given in Table IV. The salient points revealed by the table are as follows:

(1) Mental tests still constitute the predominant basis for the classification of pupils in schools of all sizes. Standardized subject tests, elementary school record, and elementary teacher's estimate are additional factors used extensively, the two latter being primarily applicable to classification in the ninth grade.

(2) Classification is likely to be carried on into the tenth grade, but materially decreases in frequency in the eleventh and twelfth years.

(3) English and mathematics are foremost among high school subjects in the possibilities of classification. Other subjects yield less frequently to differentiation of the curriculum in accordance with individual abilities.

(4) The most prevalent method of classification is the organization of separate sections. This is especially true in the larger schools. Small schools use with almost equal frequency the method of individual instruction or adaptation of instruction to the needs of the individual within the group.

One progressive principal, in answering the question "Do you have any scheme for classifying your students according to ability?" inserted a plus sign after the word "ability," making it read "ability+," and added the comment: "We do not like this word (ability). We do not think ability alone a proper basis of grouping." Accordingly, this school uses as a basis of classification in English a series of five objective tests including the following: (1) intelligence; (2) verbal reproduction; (3) memory; (4) civic attitudes; (5) imagination. The progress of the pupils concerned appears to have justified this wider application of the principle of grouping.

TABLE IV
CLASSIFICATION OF PUPILS

	No. and % of Schools							
	All Schools		Small		Medium		Large	
	No.	%	No.	%	No.	%	No.	%
1. *Classification in 9th grade*								
No. reporting	220		55		68		97	
Based on:								
(a) Mental tests	186	84.5	40	72.7	60	88.2	86	88.6
(b) Ele. sch. record	129	58.6	28	50.9	39	57.4	62	63.9
(c) Subj. tests	114	51.8	28	50.9	31	45.6	55	56.7
(d) Ele. teacher's estimate	110	50.0	17	29.1	37	54.4	56	57.7
(e) Other personal factors	4	1.8	0	0.0	1	1.5	3	3.1
2. *Classification continued in*:								
(a) 10th grade	143	65.0	27	49.1	39	57.3	77	79.4
(b) 11th grade	82	37.3	14	25.4	20	29.4	48	49.5
(c) 12th grade	47	21.3	12	21.8	7	10.3	28	28.8
3. *Subjects in which classification is made*								
(a) All subjects	40	18.2	17	30.9	9	13.2	14	14.4
(b) English	153	69.5	28	50.9	51	75.0	74	76.3
(c) Mathematics	131	59.5	23	41.8	44	64.7	64	65.9
(d) Social studies	66	30.0	8	14.5	18	26.5	40	41.2
(e) Foreign languages	44	20.0	5	9.0	8	11.7	31	31.9
(f) Science	41	18.6	7	12.7	7	10.3	27	27.8
(g) Other subjects	12	5.4	3	5.4	4	5.9	5	5.1
4. *Methods of classification*								
(a) Separate sections	166	75.4	25	45.4	55	80.9	86	88.6
(b) Ind. instruction	47	21.4	24	43.6	15	22.1	8	8.2
(c) Diff. groups in same sections	36	16.4	15	27.2	11	16.2	10	10.3
(d) Weighted credit	10	4.5	6	10.9	1	1.5	3	3.1

Read the table as follows: Of the 220 schools which reported classification according to ability in the 9th grade, 186, or 84.5 per cent, use mental tests as a basis of such classification; 129, or 58.6 per cent, use the elementary school record of the pupil; 114, or 51.8 per cent, use standardized subject tests; etc. Read similarly for other items of the table and for each group of schools.

Whatever the method or the basis of classification may be, it should be self-evident that its administration cannot be by rule of thumb, however numerous or valid the tests employed. The secondary school is dealing with human values, which involve not only measurable functions of mind and body but also other functions of personality which have not yet yielded to objective measurement. Yet all these functions—measurable or unmeasurable—are so inter-active that no one of them may be eliminated from a consideration of the *whole* pupil and of his needs. Classification, then, or grouping, or adjustment, must first of all, recognize and utilize *every* factor of available data regarding the child; and, in the second place, when complicating factors arise, it must place above all statistical findings the greatest good and development of the individual pupil.

Organization of Vocational Guidance

An organized program of vocational guidance has not kept pace with that of educational guidance. Only somewhat more than fifty per cent of the schools claim to have developed any activity which might be called "organized," and in most of these instances there is a definite realization of the weakness of the system. Placement bureaus are in operation in only about one-third of all schools, though two-thirds of the *largest* schools

of the state have organized such service. Vocational information or life career classes are conducted in less than half of the total number. Table V gives various data as to the details of organization of the general program.

It has been said that "we cannot make the most of a child vocationally until we have made the most of him educationally."[8] California high schools have emphasized the educational aspects of guidance service and

TABLE V

ORGANIZATION OF VOCATIONAL GUIDANCE

	No. and % of Schools							
	All Schools		*Small*		*Medium*		*Large*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
1. *Organized vocational guidance*								
No. reporting	156		37		45		74	
Administered by:								
(a) Principal, Supt.	70	44.9	29	78.4	20	44.4	21	28.4
(b) Spec. counselor	59	37.8	5	13.5	9	20.0	45	60.8
(c) Class advisers	33	21.1	7	18.9	11	24.4	15	20.3
(d) Vice-prin. or Dean	8	5.1	0	0.0	5	11.1	3	4.0
(e) Vocational teachers	6	3.8	4	10.8	1	2.2	1	1.3
(f) Faculty committee	4	2.5	0	0.0	1	2.2	3	4.0
2. *Life Career Classes*								
No. reporting	101		34		32		35	
Given in:								
(a) 9th year	80	79.2	29	85.3	28	87.5	23	65.7
(b) 10th year	12	11.8	2	5.9	5	15.6	5	14.3
(c) 11th year	4	3.9	0	0.0	2	6.2	2	5.7
(d) 12th year	13	12.8	6	17.6	2	6.2	5	14.3
Conducted by:								
(a) Teachers of social studies or vocational work	79	78.2	26	76.5	23	71.9	30	85.7
(b) Principal	11	10.9	6	17.6	3	9.4	2	5.7
(c) Vice-prin. or Dean	6	5.9	1	2.9	4	12.5	1	2.8
(d) Counselor	5	4.9	1	2.9	2	6.2	2	5.7
Required course	45	44.5	15	44.1	15	46.9	15	40.9

Read the table as follows: Of the 156 schools which reported a program of organized vocational guidance, 70, or 44.9 per cent, indicate that it is administered by the principal or district superintendent; in 59 schools, or 37.8 per cent, it is administered by a special counselor; etc. Read similarly for other items for each group of schools.

are thus building the foundation for an efficient program of vocational guidance. Yet the structure must be just as firm and solid as its foundation. Numerous questions have arisen from the principals themselves as to what form the structure shall take and how it may be built for most effective results. A few of the outstanding problems presented are as follows:

(1) Shall the program of counseling in the senior high school take the form of actual positive advice or direction into an occupation? Or shall it emphasize primarily the giving of vocational information regarding many occupations and of assistance to the student in analyzing his own interests and abilities, placing upon him the responsibility of evaluating those occupations in the light of his own capacity and interest?

(2) What shall be the content of the orientation course—life career course—vocational information course?

[8] Quoted from R. D. Allen, Director of Guidance, Providence, Rhode Island.

(3) How can there be made available adequate informational material regarding various occupations,—particularly those calling aside from the professions, for which there is at present little reliable information?

(4) What instruments of measurement or other devices can be used to determine a pupil's interests or aptitudes?

Each of these problems is a topic for complete discussion in itself. Suffice it to say here that a vocational guidance program in the senior high school may consider its counseling function well performed if it has placed at the disposal of the student a practical fund of information regarding the requirements and possibilities of numerous fields of work, if it has then helped him to study himself and to evaluate his own interests, abilities, and opportunities, if it has finally placed squarely upon his own shoulders the responsibility for decision. Such a program will safeguard the school against the criticism of ill-advised direction of students into this or that occupation and will at the same time help to develop in the student the realization that in the last analysis he is the one who must make the choice of his own life-work and that he must make it as intelligently as possible.

Such a program will also determine to a large extent what shall be the content of the "life career" class. Furthermore, it raises the question whether such a course should be given exclusively in the ninth grade or whether it should be reserved for or at least continued in a later year, when the student is more mature in his judgment and more capable in his decisions. Of the 101 high schools reporting "life career" classes, from 10 to 12 per cent do offer them in grades beyond the ninth.

As to adequate material of vocational information and aptitude measurement, the progress is steady though it may seem slow. Research students in our universities are continuously working upon the perfection of instruments for the determination of interests and abilities, and it is not unreasonable to look forward to the time when they will be as practical for use as intelligence tests are today. Vocational information, too, is being supplemented from time to time. Several of the most recent books (1928 and 1929 publications) include much material on occupations aside from the professions.

Data on School Counselors

In Table VI are given supplementary data of interest concerning school counselors. The most significant items are as follows:

1. Of the 97 schools reporting special counselors, 70, or 72.2 per cent, have either one or two persons so designated. The remaining 27 schools (most of them in city systems) vary in the number reported all the way from 3 to "more than 10".

2. Where other duties aside from counseling and teaching are assigned to the counselor, such combination is usually made with an administrative or executive function, such as vice-principal or dean, department head, registrar, etc.

3. In only 16 schools does the counselor receive additional compensation for her services in that capacity.

4. Of the total number of 216 counselors in the state, 31 have no classroom teaching duties. These are limited to those schools where counseling is combined with an administrative position or where there is a staff of counselors directed by an executive head or "school counselor." For the remaining 185 counselors who carry teaching responsibilities, the median number of teaching periods is 3. This means that 50 per cent of them are giving less than half-time to guidance functions, and 20 per cent are carrying on practically a full day's teaching assignment in addition to their counseling activities.

TABLE VI
DATA ON SCHOOL COUNSELORS

	Number of Schools			
	All Schools	*Small*	*Medium*	*Large*
A. Total No. schools reporting	262	85	76	101
Total No. reporting special counselor[4]	97	5	24	68
% reporting special counselor	37.0%	5.9%	31.6%	67.3%
B. No. counselors per school				
1	59	5	18	36
2	11	0	1	10
3	4	0	2	2
4	2	0	2	0
5	8	0	1	7
6	4	0	0	4
7	2	0	0	2
8	3	0	0	3
9	0	0	0	0
10	1	0	0	1
More than 10 (Committee with counselor chairman)	3	0	0	3
C. Other duties of counselor: (besides counseling and teaching)				
(a) Vice-Prin. or Dean	25	0	11	14
(b) Dept, heads	10	0	1	9
(c) Attendance clerk	6	0	0	6
(d) Registrar	4	0	0	4
(e) Miscellaneous	3	1	0	2
D. Extra compensation for counselor	16	1	4	11

Read A, B, C, D, sections of the table as follows: Of the total number of 262 schools reporting, 97, or 37.0% have designated a special counselor. In 59 schools there is only one such counselor, in 11 schools there are 2, in 4 schools there are 3; etc. Read similarly for other items of the table and for each group of schools.

TABLE VI (Continued)

	No counselors in each group of schools			
	All Schools	*Small*	*Medium*	*Large*
E. No. teaching periods per counselor				
0	31	0	2	29
1	4	0	1	3
2	45	0	2	43
3	52	1	4	47
4	47	1	17	29
5	27	1	11	15
6	9	1	2	6
7	1	1	0	0
TOTAL	216	5	39	172

Read E section of table as follows: Of all the 216 special counselors in the high schools of the state, 31 have no classroom teaching duties, 4 teach 1 period of the day, 45 teach 2 periods, etc. Read similarly for each group of schools.

[4] *Including vice-principal, dean, or teacher* who is specially designated as "school counselor," but *excluding principal* who acts in that capacity.

Evaluation and Recommendations

"Remember, it takes one hundred years to grow an oak—and for a squash six months are sufficient." Organized counseling service in even the largest of the high schools of California is not more than twelve or fifteen years old, though much that has gone by the name of "advisory systems"—with little or no system—existed before that time. Many years may pass before the work of guidance will have attained the maturity and the strength of the oak tree, yet if each year shows growth proportional to that of the last six years, there will be valid reason for gratification at the progress made. Far better to grow slowly, surely, and steadily, deep-rooted and strong, than to shoot up rapidly into a wealth of growth that will last for a season and then, because it can find no firm hold in the life of the school, will wither and die.

But always there are *conditions* of growth;—and in the advancement of our educational institutions those conditions have in every case involved persistent effort and unremitting zeal. No more will the guidance function of the high school attain its full maturity without a continued emphasis, on the part of administrators and research workers alike, upon the needs of the program and the ways and means of meeting them. Individual schools frequently have individual needs; but there are also many factors which demand common attention everywhere in the general organization of the program. The most significant of these, as revealed by this study, are offered in conclusion as recommendations, looking toward the continued development of organized guidance:

1. Leadership in the guidance responsibilities of each school should be centralized in the hands of one or more persons who are qualified for the work both by training and by personality. In rural school districts, where there is the greatest need of help in this respect, there is a possible solution of the problem through the appointment of a district counselor working from the county superintendent's office in an advisory capacity in the various schools in the district.

2. Class teachers should work in the closest cooperation with the counselor in knowing the pupil, his problems, and his abilities. The personal touch is needed just as much in the class room as in the counselor's office.

3. Carefully organized work, with definite procedure and definite objectives, will give life and efficiency to the program. A mechanical routine will kill it.

4. The grouping of pupils for instructional purposes should not be synonymous with classification into separate sections. One pupil within a class may form a group as well as twenty pupils in a class by themselves.

5. Objective tests of ability and achievement may give valuable service in the grouping of pupils, but they do not comprise the whole criterion. Each pupil is an entity in himself, aside from his score in an intelligence or an achievement test, and true guidance seeks to know him in entirety rather than in part.

6. Wise vocational counseling will emphasize intelligent vocational information and a careful study by the pupil of his own interests and aptitudes.

7. As it is true that "we cannot make the most of a child vocationally until we have made the most of him educationally," so it is also true that we cannot make the most of a child either vocationally or educationally until we have made the most of him physically, socially, morally, spiritually. The school is steadily assuming responsibilities which include the pupil's total welfare and his total development. Mind, body, and spirit are one inextricable living whole. As each yields to the influence of the other, so each must be taken into vital account in any complete guidance program.

THE EXPLORATORY-GUIDANCE VALUE OF GENERAL LANGUAGE

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THE NAME *General Language* has come to mean so many things in so many different ways that it is almost imperative, in the interests of mutual understanding, to define the exact sense in which one uses the term. In the following discussion the name is employed in its original sense[1] of *an exploratory-tryout course in two or more languages, conducted under the auspices of a foreign language department for the purpose of guiding pupils, on the basis of their manifest interests and abilities, with respect to the choice or avoidance of subsequent foreign language work.* With this understanding it is possible to proceed at once to the consideration of the several aspects of the general language program. For convenience these may be stated interrogatively as follows:

1. What is the effect of such a course upon foreign language enrollments: Is it selective or popularizing?
2. Does the course reduce the rate of failure in foreign language classes?
3. Does the course give the student a rational basis for deciding which foreign language to elect for special study?

The answers to these questions are contained in the accompanying tables. These summarize the results of a two-year experiment with general language in one of the three largest junior high schools of California. The work was first introduced into the Woodrow Wilson Junior High School, San Diego, at the beginning of the school year 1925-1926 in ten week cycle classes for all pupils of the high seventh grade. It was abandoned the following year for financial reasons, and resumed in the fall of 1927 as a low eighth grade course, meeting on alternate days throughout a semester. In all, the experiment involved some 1400 students and six teachers.[2]

Table I shows the per cent of the total school enrollment included in the foreign language classes of the institution during the five semesters between September, 1925, and January, 1928. It will be noted that the distribution reveals a fairly consistent decrease in the number of pupils electing the foreign languages during the period of the experiment. The difference, however, being at best only 7.5 per cent, is not indicative of a very high degree of selection. Indeed, it is quite possible that the decline may be accounted for on the basis of other factors entirely removed from the general language program. For example, in accordance with a city-wide reorganization of the courses of study in 1927, the school adopted the

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[1] *Department of Superintendence Fifth Yearbook*: The Junior High School Curriculum. Washington, D. C., 1927, 562 pages; pp. 293-297.
Lucy M. Bugbee *et al.* *An Exploratory Course in General Language.* Benjamin H. Sanborn and Company, Chicago, 1926, 258 pages; pp. iii-iv.

[2] For a description of the aims, method, and content of the course in this school see Walter Kaulfer's "Observations on the Question of General Language"; in *School Review*, vol. 36, no. 4, pp. 275-283. (April, 1928).

policy of permitting students to begin foreign language work only in the high eighth grade, instead of in either the eighth or ninth grades as had formerly been the rule. This reduction in the number of starting points undoubtedly operated to decrease at least temporarily the relative size of the foreign language enrollment; and there is good reason to believe that it is primarily the effect of this change in departmental regulations, rather than the selective influence of the general language course, which the table reflects.

TABLE I

Per cent of Total School Enrollment Included in Foreign Language Classes of the Woodrow Wilson Junior High School, San Diego, from January, 1926, to January, 1928

Semester Ending	*Total School Enrollment*	*Enrollment in Foreign Languages*	*Per cent Enrolled in Foreign Languages*
January, 1926	1337	399	29.8
June, 1926	1442	441	30.6
January, 1927	1660	461	27.8
June, 1927	1720	398	23.1
January, 1928	1710	400	23.4

A better index of selection is provided in Table II by the percentages of general language pupils subsequently enrolling in regular foreign language work. Worthy of mention is the fact that nearly 25 per cent more girls than boys continue. This circumstance is significant as corroborating the evidence already presented by other investigators[3] of a marked sex difference in linguistic interest and inclination.[4] Of more immediate pertinence, however, is the fact that scarcely half the general language pupils continue in the regular language courses. This proportion becomes significant when it is understood that from 75 to 87 per cent of the students, when asked on the first day of the tryout classes whether they planned to take up the study of a foreign language the following semester, expressed themselves emphatically as desirous of so doing—as many as 93 per cent of the pupils so committing themselves being able to designate the particular language of their choice.

TABLE II*

Number and Per cent of General Language Pupils Continuing in a Foreign Language

	Boys		*Girls*		*Total*	
Distribution	*Number*	*%*	*Number*	*%*	*Number*	*%*
Enrolled in General Language	190	53.5	165	46.5	355	100.00
Continuing in Foreign Language	78	41.1	108	65.5	186	52.40

* Data from the spring semester, 1928.

The question immediately arises: Are the eliminated students generally the pupils of inferior linguistic ability as measured by marks received in the course? The answer in Table III would seem to be in the affirmative. A comparison of the mean grade-point translated scores[5] for the continuing and non-continuing groups shows that the semester average for the

[3] S. S. Colvin and Andrew H. McPhail "Intelligence of Seniors in the High Schools of Massachusetts"; in *U. S. Bureau of Education Bulletin*, 1924, no. 9, 39 pages.

[4] See also: Walter Kaulfers "Intelligence of One Thousand Students of Foreign Languages"; in *School and Society*, vol. 28, no. 724, pp. 597-599. (November 10, 1928); and "Mental Selection in the Foreign Languages"; in *Hispania*, vol. 11, no. 6. (December, 1928).

[5] For the purposes of statistical treatment all grades were translated into point-score equivalents on the basis of their standard deviation distances on the linear scale of the normal frequency curve.

students subsequently electing foreign language work is 2.228 points higher than the average for students dropping the study. The absolute mean for the total continuing group is equivalent to a grade average slightly superior to the level of achievement described by the marks *2*, *B*, or *Good*, where a five-point marking system is employed; while the average for the non-continuing group, evaluated on the same basis, is somewhat below the standard represented by the marks *3*, *C*, *Fair*, or *Average*. This difference, it should be observed, holds not only for the total distributions, but also for each sex group independently. Note in addition the appreciable sex difference between the averages for the boys and girls in both classifications. This fact merits attention because of its compatibility with the situation already observed in Table II. It bears evidence of a close correlation between interest and achievement in the academic studies. Apparently

TABLE III

Comparison of Grade-Point Averages* in General Language of Pupils Continuing and Discontinuing Foreign Language Work

	Boys		*Girls*		*Total*	
Distribution	*No.*	*Average*	*No.*	*Average*	*No.*	*Average*
General Language students continuing in a foreign language....	78	7.782	108	8.148	186	8.160
General Language students *not* continuing in a foreign language....	112	5.588	57	6.607	169	5.932
TOTAL	190	6.489	165	7.616	355	7.099

* Absolute Means.

the students least interested in foreign language work achieve the poorest, and show a relatively higher rate of elimination than pupils finding the subject interesting.

It would seem that if the students of unpromising linguistic ability are generally eliminated by the exploratory work, the rate of mortality in the regular foreign language classes should register a gradual decline. The evidence to this effect in Table IV, however, is none too substantial. In fact, the percentage of failure in Latin actually shows a marked increase; while the slightly lower rate of mortality in French and Spanish can readily be explained on an entirely different basis—*viz.*, the practice adopted by the modern language department at the beginning of the last school year of awarding a low passing grade to all students who had put forth a high degree of effort in the courses, but who had failed to achieve a satisfactory command of the work. These pupils were allowed credit for the semester on condition that they discontinue the study or repeat it in high school. Their grades, however, were not listed among the failures, though from the standpoint of achievement they should technically have been included. The effect of this practice, rather than of the general language course, is in all probability registered by the table.

The obvious reason why the work does not succeed in reducing the prevailing rate of foreign language failures is contained in Table V. This tabulation presents the measures of relationship and lack of relationship between grades earned by the same pupils in general language and foreign language during the school year 1927-1928. The fact that these findings

are based upon the achievement of students in a course specifically designed to be exploratory would seem to lend the correlations a greater significance than is implied in the number of cases; especially is this true when it is observed that the data were collected during the later stages of the experiment when the work, having passed through two semesters of progressive reorganization and improvement, was presumably at its best.

TABLE IV

Percentages of Failure in the Foreign Languages from January, 1926, to January, 1928, in the Woodrow Wilson Junior High School, San Diego, California

Language	*Spanish*					*French*					*Latin*				
Semester	1	2	3	4	Av.	1	2	3	4	Av.	1	2	3	4	Av.
Term Ending															
Jan. 1926	14	5	—	—	13	13	0	—	—	9	15	0	—	—	7.5
June 1926	16	8	—	—	11	17	0	—	—	8.5	0	0	—	—	0
Jan. 1927	7	5	7.5	—	7	17	0	0	—	6	5	0	—	—	2.5
June 1927	10.5	6	4	9	7	12	0	0	0	4	11	0	—	—	5.5
Jan. 1928	8.5	2.5	6	—	5	6	3	0	0	4.5	18	11	—	—	16

— Indicates no classes.

TABLE V

Measures of Relationship and Lack of Relationship between General Language and Foreign Language Grades

Measures	*Boys*	*Girls*	*Total*
Number of Cases	78	108	186
Pearson r	.486	.369	.442
Probable Error of r	±.058	±.056	±.0399
K	.874	.928	.897

One cannot fail to be surprised by the very moderate correlation registered by both the feminine and masculine groups. Certainly there is very little assurance that a pupil achieving on a satisfactory level in the tryout classes will succeed as well in the regular language courses. For a girl, the chances are that she will do better; for a boy, that he will do worse;[6] but for neither sex is the degree of correlation sufficiently high to merit confidence. At best, predictions of probable performance from grade-marks earned in general language are only 9.5 per cent and 15.2 per cent better than random guesses for boys and girls, respectively. This lack of high correlation can by no means be attributed exclusively to the unreliability of teachers' marks; for the coefficients reported by the writer in another connection[7] for the relationship between grades in foreign language and end-semester marks in English are very substantial. The fact remains that estimates of pupil achievement in general language are on the whole no more certain prognostic measures for foreign language than simple intelligence quotients, and appreciably less accurate than ordinary grades in English.[8]

If the fault can be attributed to any factor in particular, it is probably to the inherent nature of the course itself. In the light of recent investigations,[9] the existence of a so-called "language talent" or "linguistic

[6] See Table III. Also: Walter Kaulfers "The Prognostic Value of General Language"; in *School and Society*, vol. 28, no. 726, pp. 662-664. (November 24, 1928).

[7] Walter Kaulfers *Prognostic Value of the I. Q. in Spanish.* Stanford University Thesis, 1928, 253 pages; Chapter X.

[8] *Ibid.*, Chapter X.

[9] For example: John W. Todd "Is There a Language Talent?" in *The Modern Languages Forum*, vol. 13, pp. 7-10. (April, 1928).

aptitude" is exceedingly doubtful; and the general language work, presupposing as it does the prevalence of such an intrinsic element, rests, in consequence, upon a very precarious foundation. While the evidence on this point may not be conclusive, it is at least certain that even if a special language ability apart from general intelligence exists, trained teachers are very poorly able to detect it.[10]

In the guidance of students with respect to their choice of particular languages for special study, the course is hardly more successful. The convictions of parents, the prevalence or popularity of certain languages in the community, the personality of teachers, and psychological factors entirely removed from the subject of study, exercise an overwhelming influence. Indeed, a tabulation of the language preferences expressed by the same pupils before and after completing the courses showed, when no attempt had been made to influence their selections, that their choices varied less than 6 per cent. Is it worthwhile to offer general language work when so few students are benefited? Who knows whether the changes of mind were actually induced by the exploratory course? Or whether the reversals of choice were after all really wise?

Further evidence on this phase of the problem is contained in Tables VI and VII. The percentages here reported present an interesting picture of the type of situation which one is apt to find in any city like San Diego, located only fifteen miles from the Mexican border, and harboring within its own limits a relatively large Spanish-speaking population. It is interesting to note the conspicuous predominance of Spanish in both tabulations. From the gradual decrease in the enrollment in this language during the successive semesters of the experiment it would appear that the course had exercised a valuable redirective influence by diverting a considerable number of the students from these classes into Latin and French. This result, it must be admitted, however, was not accomplished without active propaganda on the part of the teachers of the latter languages; and in the case of Latin, which is the only one of the group to show a substantial gain, the contemporaneous rise in the percentages of failure revealed in Table IV would seem to indicate that the practice was not altogether wise. If pupils originally prefer to study one language rather than another, it is undoubtedly because, in consequence of environmental factors, they have developed relatively greater interests in, and felt needs for, the language of their choice. Perhaps it is not always well to attempt to redirect these natural interests, even in the few cases where such guidance is possible. After all, the paramount objective of an exploratory course is to try out pupils, not so much to direct them. Certainly the aim should never be to strengthen weak departments, nor to create desirable positions for teachers.

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[10] This fact is contrary not only to popular opinion, but also to the writer's own convictions before making the study.

These observations, and the findings of the study as a whole, lead to the conclusion that (1) the general language course, while selective rather than popularizing in its influence upon foreign language enrollments, does not necessarily of itself assure the elimination of the poorest pupils, nor the selection of the best; (2) its efficiency in reducing the percentage of language failures is negligible; and (3) its value in guiding students with respect to their choice of particular languages for special study is nil.

In presenting these findings the writer is not unaware that the conclusions must be qualified by the fact that the data are gathered from only one school, and that experiments conducted on a larger scale elsewhere may prove eminently successful. Judged from current discussions,[11] however, the general language course does not seem to be meeting with special favor. In the few instances where the work has been reported successful, the writer has discovered upon inquiry that the courses were not properly general language courses in the original sense of the word at all, but cultural language courses, or language-preparatory courses, without any particularly exploratory purpose, frequently offered under the auspices of the English or Latin departments, and containing little in the way of real foreign language content. Classes of this type may easily have intrinsic merit in themselves—that is hardly the subject of the present writing—but the name "General Language" as applied to them is practically a misnomer. This final observation occasions the reflection that perhaps the most immediate need for a better understanding and more effective solution of the general language problem at present is a more careful definition and standardization of terms.

REPORT CHANGE OF ADDRESS

Subscribers are urgently requested to give notice of change of address. All Associate Members now on the mailing list are entitled to the October number of THE QUARTERLY. To insure delivery of the October number, notice of any change of address should be given prior to October 1.

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[11] George A. Rice "An Analysis of the Classroom Practices of 210 Teachers of Modern Foreign Language"; in *California Quarterly of Secondary Education*, vol. 2, pp. 283-289. (June, 1927).

Belle E. Bickford "Some Important Problems in the Modern Language Program"; in *The Modern Languages Forum*, vol. 13, no. 3, pp. 17-19. (June, 1928).

STUDIES BASED ON SCHOLARSHIP OF STUDENTS TRANSFERRING FROM JUNIOR COLLEGES TO THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES *

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A NUMBER of questions have arisen out of the transference of students from the junior colleges of California to the colleges and universities of the State. These may relate not only to students transferring at the end of the two-year junior college period, but also to the large number changing at some earlier point of their junior college career. It is only natural that great interest should be shown in efforts to determine whether students spending their first two years in the junior college are better or worse prepared to undertake the work of the upper division in the University than are those "native sons and daughters" who entered directly from the high school.

From the standpoint of the college and university administrative offices, certain other questions arising out of the transfer of junior college students assume considerable importance. Among others, the following may be mentioned:

1. What variation exists among the junior colleges themselves as indicated by the performance of their respective students after transferring to higher institutions? And, therefore, what junior colleges should be given a preferred status when their students seek admission? Also, how much dependence can be placed on these grades?
2. To what extent is it true, as often maintained, that junior colleges should be judged by the performance of their representatives during an entire year after transferring rather than by the results of only the first semester?
3. Does the evidence furnished by comparison of grades indicate that the best teaching in the junior colleges is done in certain fields of knowledge and that the worst teaching is done in certain other fields, as sometimes claimed by certain university instructors; or whether, taken as a whole, the quality of instruction seems to be fairly uniform?

Conclusions

The junior colleges differ considerably in regard to the grades which their students bring to the University. Groups transferring from the different junior colleges make records in the University that vary considerably among themselves. While there is a very considerable difference, in most cases, between the grades given in the junior colleges and those later earned in the University, there is a fairly high degree of correspondence in relative position, as may be seen by comparing the ranking of the key letters in Table 1 and Table 2. Some junior colleges retain approximately their

* Paper read before the Southern California Junior College Association, Compton, April 27, 1929.

relative rank, which seems to indicate that the grades given in these junior colleges have a real meaning. Others show such a decided drop, both in rank and in the grade-point ratios themselves, as to impair the usefulness of the grades given as criteria for determining eligibility for admission.

In order to establish scholarship ratings for the junior colleges, there seems to be no choice between the showing made during the first semester alone and that made during the entire first year after transferring to the University.

Considering the junior colleges as a whole there seems to be no striking difference in the effectiveness of the instruction given in the several subject groups.

The conclusions briefly stated above are set forth below in greater detail. The data on which they are based consist of tabulations of grades of all students, 409 in number, who have transferred from junior colleges in California to the University of California at Los Angeles from 1923 to 1927 inclusive, and who have completed one or two semesters of work. Not more than two semesters of work were tabulated for any one student. These grades include (a) all the grades, including failures, shown on the transcripts presented for admission, (transcripts were disregarded that showed work done in any other than a California junior college); and (b) the grades made in the University up to and including January, 1928, but not beyond the second semester for any one student. Thus we have the grades for one year of work for each entrant in the period stated, who stayed in the University more than one semester. This limit placed the large group entering in 1927 on a comparatively equal footing with the others, and made the entire group considered more homogeneous than it would otherwise have been. As many junior colleges are represented by only one or two students each, the index for each school is the ratio between all the grade-points earned and all the semester units attempted. All medians, etc., are based on weighted grade-point ratios.

1. The grades brought from the different junior colleges differ considerably among themselves, as might be expected, varying from practically a C in the case of Junior College X in Table 1, to a B plus in the case of Junior College A. The range is 1.3 of a letter grade.

The grades earned after transfer to the University of California at Los Angeles vary from a C minus in the case of Junior Colleges I and Q in Table 2, to a B minus in the case of Junior College B. The range is exactly one letter grade. The exact values of these approximate statements are shown in the tables mentioned. The index given for each school is a ratio obtained by dividing the grade-points earned by all the students of a given school by the semester units of work attempted. The grade-points assigned to the grades A, B, C, D and F are respectively 3, 2, 1, 0 and minus 1.

(*For Table* 1 *and Table* 2, *see page* 315).

The difference between the grades assigned in the junior colleges and later assigned the same students after transferring to the University is more strikingly shown by distributing the differences in order of their size. This was done and later translated into percentage of change (in every case a drop) as shown in Table 3. This ranges from a 12% drop in the case of Junior College P to a 65% drop in the case of Junior College I, which was cited above. The four junior colleges showing a drop of over 50% sent so few students that their percentages have not the significance attaching to the drop of the next three colleges from the bottom. It is only just to

TABLE 1. *Rank of 24 Junior Colleges by grade-point ratios of students before transferring to U. C. L. A.*

JC	No.	GPR
A	1	2.4
B	30	2.3
C	1	2.3
*D	6	2.2
*E	5	2.2
F	2	2.1
G	4	2.1
*H	20	2.09
I	6	2.0
J	20	1.82
K	32	1.8
L	63	1.77
M	1	1.7
N	43	1.6
O	5	1.6
P	58	1.6
Q	2	1.6
R	5	1.53
S	14	1.5
T	70	1.5
U	1	1.4
V	16	1.3
W	1	1.3
X	3	1.1

Median: 1.646.

TABLE 2. *Rank of same schools by grade-point ratios of work after transferring to U. C. L. A.*

JC	No.	GPR
B	30	1.7
C	1	1.5
*D	6	1.5
*E	5	1.4
F	2	1.4
P	58	1.4
*H	20	1.22
K	32	1.2
M	1	1.2
L	63	1.19
A	1	1.1
G	4	1.0
J	20	1.0
R	5	1.0
T	70	1.0
U	1	1.0
V	16	1.0
N	43	.98
O	5	.93
X	3	.9
S	14	.82
W	1	.8
Q	2	.7
I	6	.7

Median: 1.126.

The correlation coefficient (r) is .62±.02.

Note: The junior colleges have been assigned name-letters in the order of their ranking to conceal their identity. Those marked with an asterisk (*) are private junior colleges.

TABLE 3. *Drop from Junior College Ratios to University Ratios, expressed in tenths of a letter grade and in percentage.*

JC	No.	Drop	%
P	58	.2	12
X	3	.2	18
V	16	.3	23
B	30	.6	26
U	1	.4	28
M	1	.5	29
*D	6	.7	31
L	63	.58	32
K	32	.6	33
T	70	.5	33
F	2	.7	33
C	1	.8	34
R	5	.53	34
*E	5	.8	36
N	43	.62	38
W	1	.5	38
O	5	.67	41
*H	20	.77	41
S	14	.68	45
I	20	.82	49
G	4	1.1	52
A	1	1.3	54
Q	2	.9	56
I	6	1.3	65

* *Private Junior Colleges.*

TABLE 4. *Comparison of "scholarship ratings" of 18 junior colleges sending students in 1927 with rank by University ratios of Table 2 and percentage drop shown in Table 3.*

JC	Rating* %	JC	GPR	JC	Drop %
U	100	B	1.7	P	12
H	100	D	1.5	V	23
D	100	P	1.4	B	26
M	100	H	1.22	U	28
P	78	K	1.2	M	29
V	75	M	1.2	D	31
L	60	L	1.19	L	32
T	55	J	1.0	K	33
B	50	V	1.0	T	33
N	46	R	1.0	R	34
K	44	T	1.0	N	38
O	40	G	1.0	O	41
I	33	U	1.0	H	41
J	20	N	.98	S	45
S	0	O	.93	J	49
R	0	S	.82	G	52
G	0	Q	.7	Q	56
Q	0	I	.7	I	65

**Percent above lowest third of control group of "native" students.*

the junior colleges to state that grades offered by transfers from four-year colleges of California also show much variaion. Some of the difference may be due to the fairly close adherence at the University of California at Los Angeles to a distribution of marks prescribed by its faculty. This requirement is that normally the grade of A shall be given to the top 5% of passing students in lower division subjects, and to the top 10% in the upper division courses. Some of the junior colleges seem lately to be adopting the idea of following a fixed distribution. (*For Table* 3 *and Table* 4, *see page* 315).

It is interesting to carry the study of a given junior college through the three tables. As an example, Junior College B, whose 35 students have the high index of 2.3 for the work done before transferring, is practically at the top of the list, as shown in Table 1. The index for their work after transferring to the University of California at Los Angeles is 1.7, the highest earned. This college is shown in Table 3 to have had a smaller percentage of drop than all but three of the twenty-four junior colleges studied.

A somewhat different situation is shown in the case of Junior College J, standing somewhat above the median for Table 1, and practically at the median for Table 2. Its relative position shows little shifting. Its 23 students all told made a grade point ratio of exactly C grade, while the drop from the grades assigned for work done before and after their transfer is 49%, the largest of any junior college sending a considerable number of students to the University of California at Los Angeles.

A striking change in relative position is shown by Junior College I, ranking ninth in Table 1 and twenty-fourth in Table 2.

As the validity of the grades given by some of the junior colleges seems open to doubt, the question confronts the admission authorities, of course, whether a higher index figure should not be applied to the applicants from some of the junior colleges than to the applicants from others.

A comparison was made of the "scholarship rating" of 18 junior colleges that sent students to the University of California at Los Angeles in 1927 with the ranking of the grade-point ratios of the work done at the University of California at Los Angeles by the students who have transferred from these 18 junior colleges to the University. The correlation coefficient yielded is plus .69. Of course, the scholarship rating is not a satisfactory number statistically, as it indicates merely the percentage of students who are better than the lowest third of a control group of "native" students. It takes no account of the relative position of the better students within the upper two-thirds. For comparison of "scholarship" ratings see Table 4.

In Figure 1 are shown the medians, quartiles, and range of the grade-point ratios for the 409 students (a) while in junior college, and (b) while in the University, and also the median of a control group of 538 students of the 3rd, 4th or 5th semesters whose work had all been taken in the University. (*For Figure* 1, *see page* 317).

2. The records of all the students who entered the University of California at Los Angeles in September 1926 and who continued through the entire year were studied, with the idea of comparing their scholarship standing at the end of the first semester with their standing over a two-semester period. The group numbered seventy students. Of these, 34 made a better record during the first semester than they did during the entire year, one made exactly the same record each semester, while 35 made a better record for the entire scholastic year than they did for the first semester alone. Whatever may be the case with high school graduates coming to the University as freshmen, students coming from the junior colleges evidently do not have sufficient difficulty in adjusting themselves to conditions at the University to justify changing our scholarship rating from a semester to a year basis.

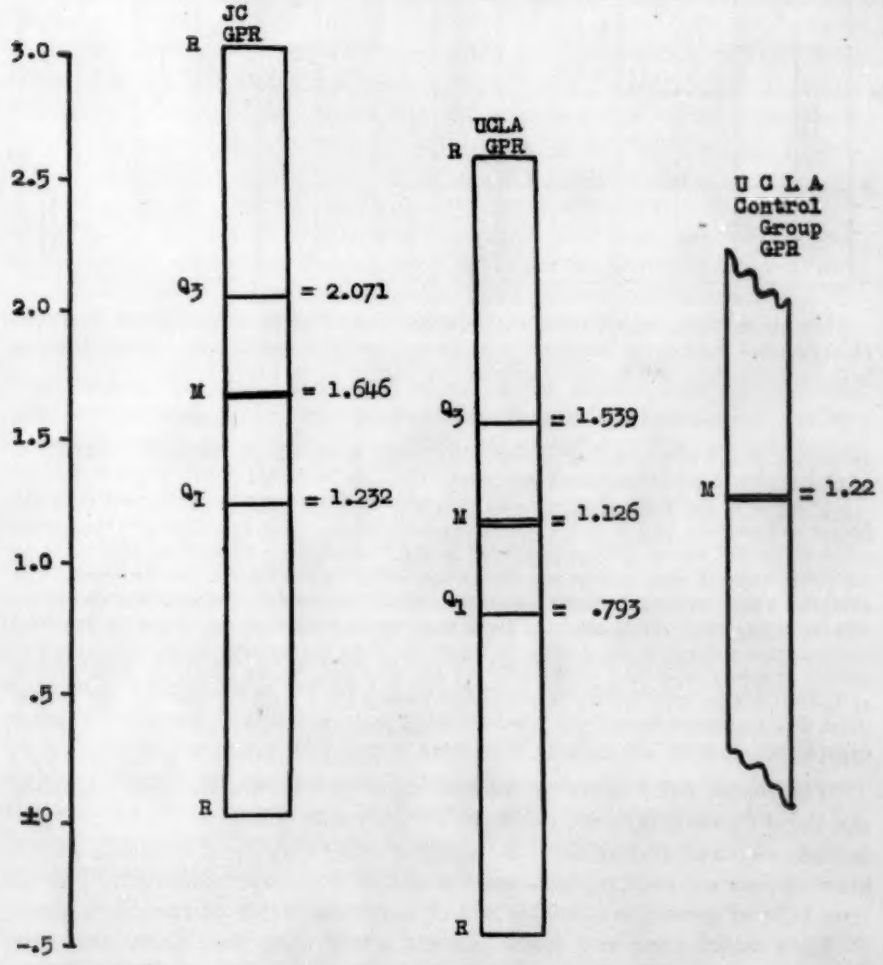
3. When the scholarship data are segregated according to academic fields, some interesting relationships appear. These data have been arranged into two groups. One tabulation was made of all the grades in the several fields, first in the junior college and second in the University. The next step was to find the ratios between all the grade-points made in a given field and the semester units attempted. These

ratios appear under the two headings JC and UC in Column A for each field. The second tabulation was confined to the marks of those students who continued in the University the fields of work begun in the junior college. The corresponding grade-point ratios are shown in Column B for each field.

Reference to Figure 2 shows a very narrow range in the position of the ratios for the junior colleges, the highest being 1.9 (philosophy) and the lowest 1.2 (biology). Excepting the biological sciences, the lowest is 1.7 shared by mathematics and social science. The records made in the several fields after transferring to the Uni-

FIGURE 1.

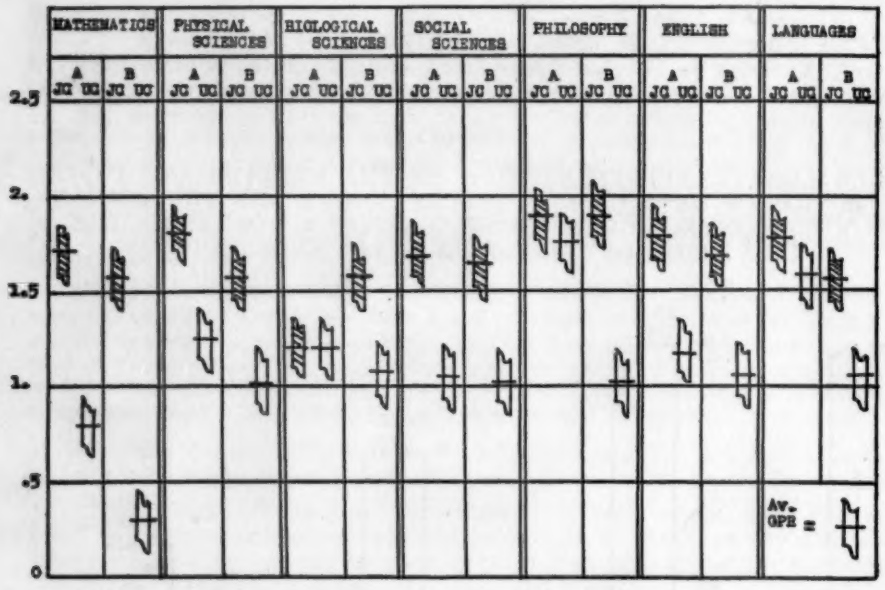
DIAGRAMATIC REPRESENTATION OF THE MEDIANS AND DISTRIBUTION OF DATA USED IN TABLES 1 AND 2, AND THE MEDIAN OF A CONTROL GROUP OF 538 "NATIVE" STUDENTS OF THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES IN 1926.



The above diagrams are based on a "scatter-diagram" tabulation of the grade-point ratios of all students made in (a) the junior colleges, and (b) the University of California at Los Angeles 1923-1927.

FIGURE 2.

DIAGRAM COMPARING THE GRADE-POINT RATIOS OF TWO GROUPS OF RECORDS IN SEVEN FIELDS OF ACADEMIC INTEREST



Group A, ratios of all transfers arranged according to fields; Group B, ratios of sequential records of transfers who have completed courses in a given field in both junior college and in the University of California at Los Angeles.

versity show a wider range on a somewhat lower level, namely, between 1.8 and 0.8, in philosophy and mathematics respectively.

If we now study the group of students who continued in the fields started in the junior college, we find a rather anomalous situation. The gap between the ratios achieved in the junior colleges and later in the University is as wide in two cases as with the other all-inclusive group, and much wider in the others. If the first group excluded those who carried the subjects in both institutions, the contrast would be still more striking. Students who begin their mathematics in the junior college and continue the subject in the University seem to have the hardest time. While junior college students who take philosophy for the first time make nearly as high grades as did those who took it only in the junior college, this good fortune did not follow those who continued the subject after making a start in the junior college. The other departments showed less striking differences.

The reader will readily see that the significant finding of these studies is not the difference between the work of the whole group of junior colleges on the one hand and of the University on the other hand so much as the great difference existing between the junior colleges themselves. This is true both of general tendencies and of particular fields of the curriculum.

Data which time and space prevent introducing here show also that there is considerably greater difference between the junior colleges themselves than between the junior colleges and four-year colleges, as shown by the performance of their students after transferring to us.

JUNIOR COLLEGE TRANSFERS AT THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES

HARRY M. SHOWMAN
Recorder, University of California at Los Angeles

IN the last issue of THE QUARTERLY appeared a paper* in which were stated the results of a study of the records of students transferring from junior colleges to the University of California in Berkeley. The accompanying tabulations and diagrams were presented during the discussion of that paper to show the results of a corresponding study made at the University of California at Los Angeles.

In September, 1926, there were admitted to the University of California at Los Angeles 103 students who presented credits for work done in junior colleges; of these, 53 had spent four full semesters in junior college and had not attended any other type of institution higher than the high school. The records of this smaller number are those considered here.

The group of "native" students used for comparison consists of 150 women and 100 men, all of whom entered upon their fifth semester of residence in the University in September, 1926; thus they received grades from the same corps of instructors under the same general conditions as did the transfers from junior college. A first group of 75 women and 50 men was selected as the names occurred in alphabetical order. When the results of their records were compared with those of the junior college group, the disagreement with a previously published study led to the selection of another sample group from a different part of the alphabet. The second group yielded results which differed so little from the first that it was evident the results were not accidental, and the entire group was used for the comparison.

Table I shows the source of the junior college transfers; Table II, the curriculum by college of all students studied; Table III gives the grade-point ratio averages by semesters for men and women separately, and for the total of each group. These figures were computed on the basis stated in the paper to which reference is made; each is the quotient of the total number of grade-points earned for the period divided by the total number of units undertaken. Table IIIa gives the average grade-point ratio for the groups in the lower and upper divisions. Tables IV and V show the numbers remaining in attendance for successive semesters in the upper division and those receiving a bachelor's degree by September, 1928. In the last two tables, the basis on which the percentage is computed, is the number completing the fifth semester.

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*A Comparison of the Scholarship Records of Junior College Transfers and Native Students of the University of California, by G. M. Ruch, D. C. Baker, and E. Ryce; read before the Junior College Section, Secondary School Principals' Convention, at Oakland. March 27, 1929.

Honors were awarded to eleven of the native students, or 10.6% of the number graduating; none of the transfers received honors. Figures are not available as to the number of students of either group who proceeded to graduate study.

Graphs A and B are based upon the figures of Tables III and IIIa. Graph A represents the combined results; in Graph B the representation is by sexes.

TABLE I

SOURCE OF JUNIOR COLLEGE TRANSFERS

	Men	*Women*	*Total*
California:			
District Junior Colleges	11	23	34
High School Junior Colleges	3	7	10
Private Junior Colleges	3	4	7
Kansas:			
Public Junior Colleges	0	1	1
Private Junior Colleges	0	1	1
	17	36	53

TABLE II

ENROLLMENT BY COLLEGE

Junior College Transfers:	*Letters and Science*	*Teachers College*
Men	17	0
Women	19	17
Total	36	17

Native Students:	*Letters and Science*	*Teachers College*
Men	92	8
Women	55	95
Total	147	103

TABLE III

GRADE POINT RATIO AVERAGES BY SEMESTERS

Junior College Transfers:

	1	2	3	4	5	6	7	8
Men	1.76	1.75	1.86	1.81	1.25	1.39	1.29	1.23
Women	1.74	1.76	1.79	1.81	1.28	1.34	1.41	1.33
Combined	1.75	1.76	1.84	1.81	1.27	1.35	1.37	1.30

Native Students:

	1	2	3	4	5	6	7	8
Men	1.10	1.22	1.38	1.40	1.47	1.45	1.54	1.80
Women	1.25	1.31	1.43	1.42	1.48	1.48	1.61	1.67
Combined	1.16	1.28	1.41	1.41	1.47	1.47	1.59	1.72

TABLE IIIa

GRADE-POINT RATIO AVERAGES BY TWO-YEAR PERIODS

Transfers	*Semesters 1-4 in Junior College*	*Semesters 5-8 in Univ. Calif. at L.A.*
Men	1.80	1.30
Women	1.77	1.33
Entire group	1.79	1.32
Native Students	*Semesters 1-4*	*Semesters 5-8*
Men	1.27	1.53
Women	1.34	1.54
Entire group	1.31	1.54

GRAPH A. AVERAGE GRADE-POINT RATIOS FOR TRANSFERS AND NATIVE GROUPS BY SEMESTERS.

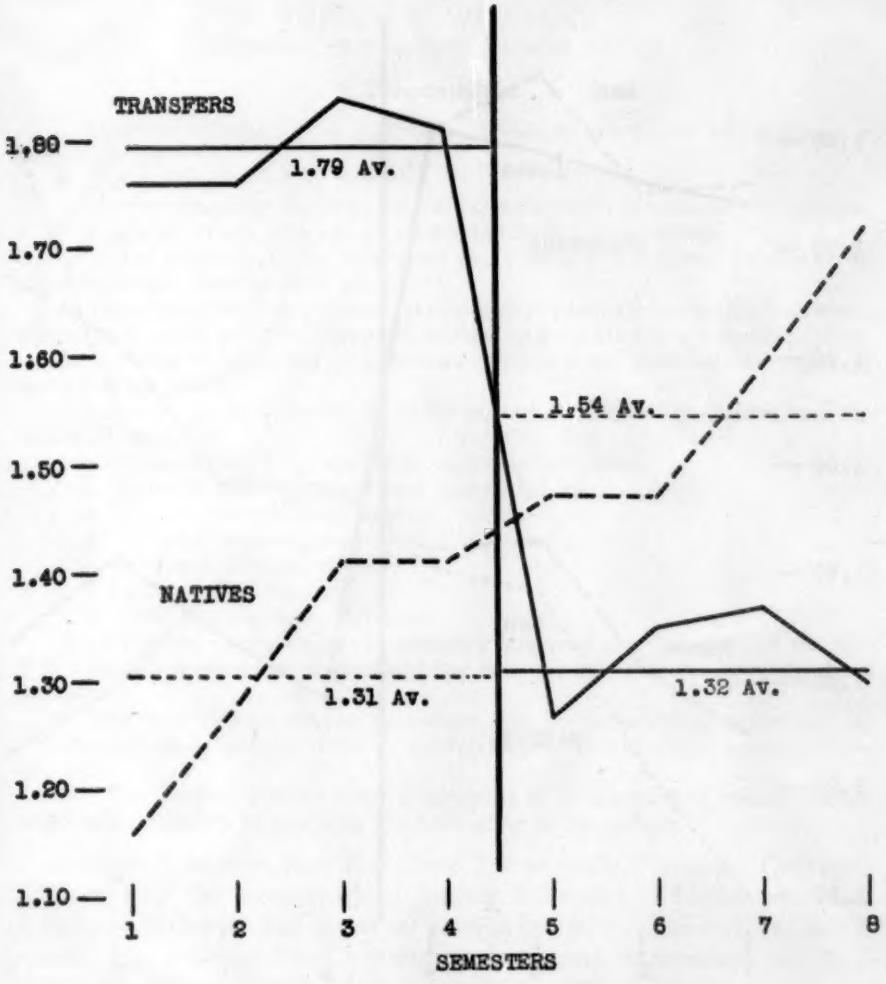

TABLE IV
SEMESTERS COMPLETED BY STUDENTS

Junior College Transfers:	*Lower Division*	5	6	7	8
Men	17	16	14	11	10
Women	36	33	31	23	20
Total	53	49	45	34	30
Percent remaining after 4th semester	100	92.0	69.5	61.2	
Native Students:	*Lower Division*	5	6	7	8
Men	100	76	66	47	40
Women	150	133	95	75	68
Total	250	209	161	122	108
Percent remaining after 4th semester	100	77.0	58.5	51.7	

GRAPH B. AVERAGE GRADE-POINT RATIOS FOR TRANSFERS AND NATIVE GROUPS, BY SEMESTERS AND BY SEX.

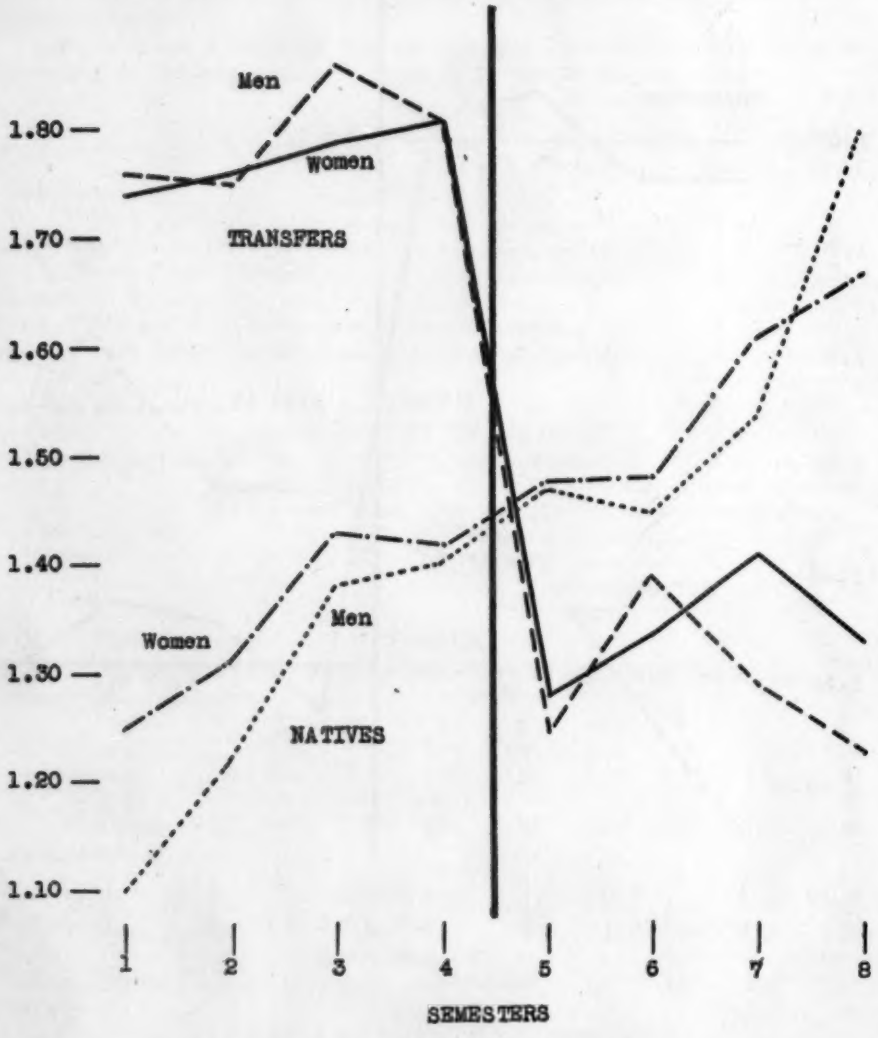

TABLE V

STUDENTS GRADUATING

	Graduates *by June* 1928	*by Sept.* 1928	*Enrolled at end of* 5th *semester*	*Per cent Graduating*
Junior College Transfers.....	20	23	53	43.5
Native Students.....	95	103	250	41.2

THE JUNIOR COLLEGE—CALIFORNIA'S OPPORTUNITY

JOSEPH T. WILLIAMS
Professor of Education, Whittier College

Propositions

1. It is the opportunity of the junior college to put higher education on a scientific basis.
2. The 6-4-4 plan is the best.
3. For the majority of college students general education should not continue after the age of twenty, the age of graduation from junior college.
4. In the economy of the individual life, efficiency in a useful occupation is more important than general culture.
5. Vocational training, however, should not be narrowly utilitarian, but broad and cultural. The antithesis between cultural and vocational is a harmful error.
6. The new college must be a product of present-day thinking, therefore not hampered by tradition.
7. Some of the basic needs to be considered in school organization and the course of study:
   a. Personnel work in respect to vocation and career.
   b. Physical training—plays and games for all.
   c. The sex and marriage interest.
   d. The understanding and control of industry.
   e. Civic and political education.
   f. International Relations.
   g. Education through expression.
8. It was the character of the subject matter and not the stage of the student's mental development that caused the first two years of college to be called secondary.
9. The new college should be independent of university domination. Its policies can be determined best by conferences of faculties and administrative officers.
10. The teacher, besides being a specialist in a chosen field, should understand and cooperate in attaining the total aims of the college.

College Education Has Not Been Scientifically Planned. California is faced with the opportunity of leading the nation in higher education. It is more advanced than any other state in the public junior college movement. The movement has already attained great momentum, and California has the wealth to establish a goodly number of colleges of such size and strength as to assure their success. The unique opportunity of California is to put higher education on a scientific basis. College education has not been scientifically planned. It has followed the tradition of centuries. Scientific pedagogy has made achievements, for example, the six grades elementary school and the junior high. Every subject of the six grades has been the object of careful scrutiny, and has been made over in accordance with new vision. Children today are taught a far richer content by better methods in less time. The seventh and eighth grades have been dropped. The junior high school is a creation of our own day, the work of the new scientific education. But ascending beyond the junior high school, scientific pedagogy has made little impression as against tradition. True we have smatterings of progress, such as the diversified high

school, and the beginnings of personnel work in colleges. But the general culture high school and the four-year college remain substantially institutions traditionally determined.

Claims of the 6-4-4 Plan. Since the junior college was begun mainly for the purpose of duplicating in local communities the freshman and sophomore work of the university, it has, of course, covered but two years. It seems very likely, however, that ultimately the 6-4-4 plan of school organization will prevail. Advocates of the 6-4-4 program urge in its favor that it will simplify organization and economize cost, prevent overlapping of courses, reduce the problem of articulation between institutions, and, by holding the students longer, develop a better morale. After the junior high school has been extended upwards one year and has become a four years high school; and the upper two years of the traditional high school and the first two years of the traditional college are united into a new four years college, it will be logical to drop the term "junior" from both.

College Course to Be Completed at Age Twenty. With progress in the selection of subject matter, with improved teaching methods, and the lengthened school year, the graduate of the new college will have advanced as far as has the college graduate of the past. If the student is up to grade he will complete his college course by the age of twenty. He is likely to be nearer twenty-one. Surely not many young people should be encouraged to continue longer education of the general type. The occasional student may profit by it, but not the mass of students flocking to the colleges today. At this point they should take up specialized and professional training, or leave school and become wage earners. California's opportunity for leadership in higher education is to establish a number of good four-year colleges terminating two years earlier than the traditional college. If this is sound philosophy in California, it is sound elsewhere, and in time other states will follow.

Conflict Between Cultural and Vocational Education a Mistaken Antithesis. The argument against the junior college by Professor Palmer of Harvard University to the effect that it means too early specialization and, therefore, a surrender of the cultural to the vocational interest, is but a survival of the mistaken antithesis between cultural and vocational that has come down to us from the Greeks. Liberal studies were those of free men, men freed from labor because supported by the *hoi polloi.* While social and economic theory has long repudiated this point of view, it has held on in education. The fact is, a man's efficiency in his vocation may be the best index of his culture. Success in a happily chosen vocation provides expression of personality, therefore, contentment and happiness. It usually makes one a better father, husband, neighbor, and citizen. It is the man highly educated but unable to make a living who becomes discontented and sometimes socially dangerous.

Vocational education need not be narrow. In fact it must be insisted that professional and vocational schools humanize their courses. The

young doctor should know the significance of medicine in the history of mankind and also learn to subordinate personal gain to the ideal of healing. The plumber can likewise profit by study of ancient and modern hygiene of cities, seeing better through it the social significance of his work. Broadly presented, certainly vocational studies are cultural.

Three Types of Junior College Courses Recognized in California. The California State Board of Education recognizes today three types of junior college courses: (a) Junior certificate courses, open only to recommended high school graduates; (b) Diploma courses, stressing health, citizenship, and home-making, and open to all high school graduates; (c) Vocational courses. Such variety in the scope of work makes possible a much needed differentiation. In recent years colleges have been crowded with students, many of whom are not seekers after learning, whose ability is not of the kind required for academic success. This type of student has little to gain from the traditional college, but the new institution, by its more inclusive organization, can provide for his needs. The new college, therefore undertakes to prepare for professional schools, also to supply further general education for useful and happy living, and also to train for vocations. In this way all types are served.

New Four-Year College to Confer A. B. Degree. When the new four-year college has become well established, it may appear wholly appropriate to confer the A. B. degree on graduates who have excelled in liberal arts. This degree has lost its former significance because conferred for promiscuous kinds of work, some of which by no stretch of the imagination can be called liberal arts, and conferred upon persons without the types of interest the term connotes. Just because the educational offerings of the new college are much more comprehensive, and adapted to the needs of a greater variety of young minds, it will be possible to limit such a degree as the A. B. to that minority, however small, that can creditably attain it. It is conceivable, in fact, that by a more vigorous process of selection, the degree may take on a greater significance than it now has.

"What Knowledge Is of Most Worth?" To realize its possibilities the new college must be a product of present-day thinking. This means it must put aside tradition as its guide. The most ringing challenge in educational history is Herbert Spencer's question asked in 1861, "What Knowledge Is of Most Worth?" Again in 1929 we must ask, "What types of training are most needed by young men and women today?" And when we decide on aims we should go after them in ways as direct as possible. We are justified in asking: "How does given material contribute to the specific end sought?" "Is it the least wasteful and most direct way of reaching the end?"

No attempt will be made here to outline a course of study for the new college. No curriculum can be satisfactory, however, that does not build squarely upon such basic needs as the following.

Personnel Work in Respect to Vocation and Career. Vocational guidance has become a familiar term. The exploratory activities of the junior high school and the diversified types of high school courses show that progress has been made.

Nevertheless, one needs only to interview the students of any college to discover how chaotic are their ideas and plans in respect to vocations and life careers. Evidently we need to collect a vastly greater mass of facts about professional and vocational possibilities, and by means of exhibits, charts, excursions, text books, lectures and personal interviews, make them useful to college students.

Physical Training. Modern life requires a strong and vital body. How poorly the colleges and universities have used their opportunity! With hurrahing for a winning team and supplying the community with amusement, the greater portion of the student body has been neglected. This is an evil against which the junior college authorities must resolutely take a stand. Athletics and games there should be in abundance, and every member of the college brought into them adequately. But intercollegiate contests should be prohibited entirely, or adequate precautions taken to avoid the evils that come from over-emphasis on winning teams.*

The Sex and Marriage Interest. As a matrimonial bureau the coeducational college has performed one of its best services. Happy matings depend on wide and thorough acquaintance. This institution has provided the opportunity for the young man or woman to become well acquainted with a somewhat large group of persons of the opposite sex having similar interests, ideals, and loyalties. While the junior college age is too young for marriage, many attachments formed at this time will result in marriage later. Can a matter so deep in the minds of young people be ignored by the school? Surely the growing instability of the family, evidenced in the mounting rate of broken homes, shows that influences leading to happy marriages are among the basic needs.

The Understanding and Control of Industry. Comprehension of the existing system of business, industry and private property, and of the acute social conflicts and problems in the situation, is possibly the main concern of higher education. The massing of population in cities, the rapid increase in wealth, the vast accumulations of capital, the growth of colossal corporations and the merging of giant industries, have come with such staggering suddenness that education has not begun to cope with the situation. Problems involving production, distribution, finance, taxation, private property, fair wages and fair prices, the meaning of wealth and its obligation to the public service, the uses of material goods in furthering human happiness—these are problems of which men today have become keenly aware, but feel themselves inadequate to solve. Apathy, synicism and discontent are the frequent results. In this field of education the junior college must play an important part.

In addition to the factor of social control, the student should be taught business principles for his own protection and gain. It is important that he learn thrift, the advantages of accumulating capital, and to judge of investments.

Political Education. The junior college student will graduate at nearly the same age at which he is entitled to vote as a participating citizen of the United States—surely a significant fact for the college. Cannot something be done to make more impressive to young Americans the precious privilege of sharing in the sovereignty of the nation? Young people also should be encouraged to actually participate in political life.

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* On the day the Editor was reading the manuscript of Dr. Williams, he came across an editorial appearing in *The Daily Californian,* Berkeley, which is interesting in connection with the strictures on college athletics made by Dr. Williams. Under the caption, "Football's Rapid Growth Is Bringing a Strong Reaction Against the Game," the editor of *The Daily Californian* says:

"The past few years have brought an increase in the growing tendency to regard East as West as far as the athletic world is concerned. Last Saturday the General Manager of the A.S.U.C. left for the East to consider a continuance of intersectional athletic contests.

"To counterbalance the idea that there should be more of these contests, a movement is growing in the conservative East against further intercollegiate competition. Intramural games within the universities are suggested as a substitute, the winner to play a similar team in an adjacent college.

"Many serious objections can be raised against the game as it is now played. Professionalization, the domination of athletics over every other feature of college, lack of opportunity for most students to participate in the game—these are evil features that are being partially remedied at California and other universities. Unless a complete remedy is found, the intercollegiate game may disappear."

International Relations. Uneducated people are notoriously provincial. The great size of the United States and our remoteness from other countries have intensified our self sufficiency and our disregard of other peoples. We must depend upon our institutions of learning to develop in America the cosmopolitan type of mind which is necessary for world peace.

Education Through Expression. Training by participation suggests the place of expression in education. The claim is made that junior college teaching is superior to that in the corresponding years of the university. To make this claim good the technique of junior college teaching should be built up squarely upon the basis of the pupil's expression. Educational results cannot be tested by ability to put on occasional test papers what is absorbed from class-room and text book. Education should lead to power manifested in actual life situations.

The factors enumerated above, personnel work and vocational guidance, plays and games for all, wholesome attitudes on sex and marriage, the understanding of industry, political and international education, the emphasis on self-expression, are urged here because they are vital needs that are usually neglected in college practice. The list might be increased. For example, should we continue to graduate students from college wholly ignorant of the simplest elements of civil and criminal law, as nearly all of them now are? It is not probable that our citizens will be willing to support higher education unless they can see evidences of gain in the lives of their children, and gain in the public welfare. Why should they?

Is Junior College Education "Secondary?" Because a few years ago President Harper, Dr. David Starr Jordan and others suggested the similarity in curriculum of the first two years of college with the high school, the junior college since organized has been considered of secondary grade. The explanation of the "secondary" label is found in the character of the subject matter rather than in the psychology of the student's mind. The first two years of college were called secondary because the pupil, in obedience to a prescribed curriculum over which he had no control, was found to be studying just the same things he had studied in high school; the curriculum was secondary because it contained so many required subjects, including foreign languages and mathematics, which had to be taken before the pupil was permitted to begin the more independent and selective work of the higher years. It should not be assumed that the pupil's mind is "secondary," if this implies incapability of response to more independent methods of teaching and learning.

The essential purpose of the new college is certainly not that of appendage or preparatory institution to the university. The life problems of the youth from sixteen to twenty are to be studied, and a course of training is to be outlined, based upon his fundamental needs. Dare the new college be independent? Koos studied the functions of the junior college as stated in a collection of catalogues. The first and most prominent function he found to be, "offering two years of work acceptable to colleges and universities," and he adds, "This function will be more certain of performance than any of those following in the list." If the junior college, however, is merely to reproduce the first two years of the traditional college, without attempting a more fundamental reform in higher education, it will create no stir in educational history and will disappoint

the hopes of its friends. It is best that the new college develop in a cooperative spirit, but without university domination.

The new colleges should be both alike and different in type. No state has such variety in topography, climate, natural resources, industries, population mixtures and historical factors as California. It would be fortunate for each college to develop along unique lines according to local interests and insights. On the other hand, there should be standardization. The new colleges will supply training to young people whose ages, needs, and problems are much the same. What the methods, curricula, and policies are to be can be worked out best by conferences of administrative officers and faculties.

The success of the new college will depend upon the type of teacher secured. Besides being a master in his chosen field, the teacher should appreciate the broader life aims for which the college strives. That is, each is to be an educational philosopher, keeping in mind the whole aim of education. He should be paid adequately, so as to be freed from economic worry. His teaching assignment should be so limited as to permit him to have personal contacts with students, and to avoid the mechanical methods of instruction so common in high schools.

Summary

California is already more advanced in the establishment of public junior colleges than any other state. These new institutions, if developed in the right way, will give to California the unique opportunity of leadership in higher education. Population centers and economic wealth make possible a number of strong four-year colleges terminating two years earlier than the traditional college—that is, when the normal pupil reaches the age of twenty. General education for the mass of students should not extend beyond this point.

The upper years of the traditional four-year college should be given to specialized work, professional and vocational in nature. Such work need not be narrowly utilitarian; it, too, can be humanistic and cultural. New institutions will arise for this purpose, and some of the old colleges will reorganize to meet specialized needs. The new college will prepare students to enter the university and professional schools. But it must by no means be dominated by them. In fact, to be most useful it must free itself of curricular traditions. It should adopt only such parts of the old curriculum as serve its purposes. The basic needs in the lives of young people and the public welfare—these alone will determine the desirable types of training. To succeed, the college requires a group of devoted teachers who, while specialists in chosen fields, are also educational philosophers, having vision of the total possibilities of the college enterprise.

JUNIOR HIGH SCHOOL LIBRARIES IN CALIFORNIA

This survey was made by a committee of the California School Library Association, consisting of Miss Marjorie Fullwood, Franklin Junior High School, Long Beach, Chairman; Miss Elizabeth Patton, Garfield Junior High School, Berkeley; Miss Clara E. Purdum, Mt. Vernon Junior High School, Los Angeles. The report of a survey of Senior High School Libraries by a similar committee was published in the April number of THE QUARTERLY.—EDITOR.

A QUESTIONNAIRE relating to the various aspects of junior high school library service was sent to each of the ninety junior high schools in California. Replies were received from fifty-seven. The answers to the questionnaire are tabulated in the following report. No claim is made that it is a mathematically exact representation of conditions. There are too many qualifying features to be considered to allow that. It is, then, rather an indicator of *trends.*

In reading the results tabulated below, one should keep in mind the fact that we are in a period when librarians are attempting to set up and achieve certain standards, which, it is hoped, will regularize library policy and practice to the same extent that educational standards have been established in the schools. As a matter of fact, various sets of standards have been compiled, but such variation exists that there is still much to be done. There is naturally a lack of state uniformity, to say nothing of national uniformity. In California one of the most urgent needs is that librarians in the school libraries should be teachers. The state teachers colleges should offer summer courses which will enable teacher-librarians to qualify.

The questionnaire which provided the material for this survey was designed with the purpose of exposing to us our weaknesses and of acting as a basis on which to consider the possibilities of improvement. It must be admitted, however, that much of our present lack of uniformity is the result of non-observation of existing standards promulgates by professional organizations of unquestioned prestige.[1]

Librarian's Extra Duties. The questionnaire showed that many librarians should be classified rather as teacher-librarians, inasmuch as a few gave as little as one period a day to the library, or did the work voluntarily out of school hours; several taught from one-third to one-half of the school day; and others carried one class or had a home-room period. In this survey anything less than a full library day was counted as part-time. In addition to teaching, extra activities carried by the librarian included a vice-principalship, a counselorship, a secretaryship.

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[1] Published standards for school libraries:

Certain, C. C.—Report on standards of organization and equipment for schools of different sizes. (Now o. p.; revision in process) North Central Association of Colleges and Secondary Schools.

Wilson, Martha—Scorecard for school libraries. American Library Association.

The questionnaire further revealed that many schools were without textbook clerks, in which case the librarian usually carried the textbook work of the school in addition to her ful library program. They reported that the time thus taken from legitimate library work varied from fifteen minutes to an hour or more daily, besides taking all of the first and last weeks of the term.

Reaction to Supervised Study. The question concerning the librarian's reaction to supervised study as it affects the library was not very satisfactorily answered. The replies indicated that the almost inevitable formalization of the library was not frowned upon particularly. A few regarded it as serious and dangerous even in the face of increased usage, however. They stated that they thought that greater group use did not compensate for the loss of individual use. It was felt that the library under this system had a tendency to take on the aspect of an adjunct to the classroom and study hall which was detrimental to the spontaneity and informality which we seek to introduce without a loss of efficiency. The fact that the atmosphere of the library differs from the work-a-day atmosphere of the classroom is its chief charm, and something to be preserved.

A possible way out is the education of the faculty to the idea of sending their students as *individuals* to the library, to engage in independent reference work with a minimum of assistance from the librarians, while the teacher remains with the residue of her class in her room to guide those who can not work independently and are in need of teacher help. This program could be carried out during the second half of the period after the recitation is over and the advance work has started. Students respond very well to this plan, and it certainly induces a spirit of responsibility which is not to be cultivated by bringing a class of thirty-five to the library and putting into their hands thirty-five identical supplementary texts. That is a mere transfer of a classroom situation to another place with consequent loss of time.

Another possible avenue of escape from the formalization of the library is the placing of complete sets of supplementary text material indicated in the course of study in each teacher's room. This would, of course, take money, but the results would undoubtedly repay. The library could then be used for individual students coming from the study hall (for most junior high schools seem to retain at least small study halls) and from classes to look up material for special reports or from special sources. As it is, in many schools the individual has to give way to the group when seating space is limited.

Methods Used in Training Student Assistants. Instructional methods in the training of student library helpers vary greatly. However, most of the courses appear to have the common quality of informality even when carrying academic credit. They may be classified generally into the following types of methods:

(a) Formal class organization with a weekly meeting for routine assignment and recitation.

(b) Mimeographed sheets issued weekly to be completed by students according to contract or some similar method. No regular class meeting. Sometimes the problems come only at fortnightly intervals. The lessons are largely technical in character. Papers graded by the librarian.

(c) Informal instruction through the practical experience of working in the school library. Some organize their helpers into library clubs and carry on their training through the club group.

Plan (c) seems to be the one in greatest use, but it is to be presumed that the reason for this lies in the lack of time in the school library day to find opportunity for a more regular type of instruction. And this method does train children very well in the clerical details of library work, but it offers no place or time for anything of books themselves and their appreciation. Some librarians think that their time can more profitably be given to the whole school rather than to a small and rather special group.

Plan (a) offers an opportunity for teaching books and their appreciation, but this plan seems to have found a place in very few courses of study. It is undoubtedly the most satisfactory method and is producing excellent results where used. A typical example of the arrangement is herewith outlined:

> Weekly class meeting on Thursday, but coming at different periods, as the time is taken from the regular meeting of some other class and the rotation of time prevents encroachment on the time of any one teacher.
>
> Problem due every two weeks; alternately concerned with library technique and literary appreciation.
>
> Term project, consisting of the reading of a recognized classic and a rather extensive review of it. This is somewhat in advance of anything demanded by the English department.

Plan (b) is used fairly widely, and with the new contract-method vogue, the type of printed instructions and problems issued by the librarian tends to vary less widely than formerly. An average program for this sort of teaching follows:

> Twelve library lessons; one each fortnight.
>
> Students must maintain a general average of B or better.
>
> Problems cover filing, simple classification, use of card catalog, encyclopedias, dictionaries, and a few other primary reference works.

Library Permit System. Methods of issuing passes to students can be divided roughly into the following groups:

(a) Passes issued by any teacher with a minimum of checking on pupil use.

(b) Passes issued by subject teachers only (sometimes limited to English and social science teachers) and so made out as to allow librarian to check on the pupil's use of library time. This system sometimes includes the issue of pleasure-reading passes by the librarian. One school reports using a duplicate pass, one part being detached and left in study hall and the other taken to the library and later being returned to the teacher for

checking. The danger of such minute supervision is, of course, the destruction of the informal freedom of the library, the "liberty under law" ideal.

Student Use of the Library. There was such great variation shown by the returns on the questions relating to this topic that the conclusion is forced upon one that the lack of exact statistics and consequent guesswork make the answers of less value than had been hoped. Of course, there is always to be considered the variation due to school policy, the library activity of the teaching force, and naturally, that of the librarian herself. Reports on library use varied from 20% to 125%.

Free Reading in the Library. In answer to the question concerning limitations placed on free reading in the library, there was evident a very commendable lack of excessive regulation. About the only restrictions listed referred to the outside material of an objectionable character and to the occasional prohibition placed upon a student by some teacher because of the unsatisfactory condition of the student's class work. The teacher's demands upon her students constitute an automatic check to the overdoing of pleasure or free reading. It is only an occasional case that calls for watchful checking on the part of the librarian. A continual supervision of student's library activities would result in a library situation far from ideal.

Deductions From the Survey

The major deductions to be drawn from this survey of the junior high school libraries of California are both heartening and disheartening. It would seem that the training of the librarian should be our chief concern at present.

Out of the fifty-seven schools answering the questionnaire, fourteen had librarians with no training whatever. And undoubtedly one should connect with this the probability that of those schools that did not return the questions many were either without libraries or librarians. In fourteen other cases the librarians had only had summer course training. Twenty-four had taken a one-year course, and four the two-years course. It is significant that the greatest number of trained librarians (one-year course) are found in schools of from 1000 to 2000. This group throughout seemed to show up most satisfactorily. Undoubtedly the best type of work is possible under the conditions of the medium-sized school, neither too small to be crippled by lack of building and equipment nor too large to become impersonal and unwieldy. But the fact remains that many libraries—and not all of them are in small schools—are in the hands of untrained people—classroom teachers. The great need is for library schools offering summer courses, as well as for the regular course, to enable these people to qualify.

Another related lack is that of full-time librarians. The statistics reveal that only forty have a full library schedule; the other fifteen who answered the question reported other work, varying from one period to six or seven.

Many librarians are carrying heavy programs with practically no help other than that given by students. The teacher handles, perhaps, between two hundred and three hundred students a day, but in many cases seventy-five per cent of the school demands library service daily. Clerical help is provided in comparatively few schools, and this is just what the librarian needs, someone to relieve her of those innumerable petty, mechanical and yet necessary details, so that her time may be given to the important phases of library work.

The outstanding advance is seen in the fact that library instruction for students, both student assistants and the school as a whole, has achieved a regular place in the curriculum of many schools. It is true that not a great deal of time is yet allotted to library instruction, but it is gaining constantly, both in teaching time and the quality of instruction.

SURVEY OF CALIFORNIA SCHOOL LIBRARIES

THE JUNIOR HIGH SCHOOL

	Less than 500	500-1000	1000-2000	*Over* 2000	*Total*
A—THE SCHOOL					
Number of schools	23	36	28	3	90
Number reporting	10	21	23	3	57
Teaching staff					
1-10	1				1
11-20	2				2
21-30	5	3			8
31-40	1	10			11
41-50		4	4		8
Over 50		1	18	3	22
Supervised study	7	13	19	3	42
School text clerk	2	10	13	3	28
B—THE LIBRARIAN					
Training					
2 year course	1	1	1	1	4
1 year course	1	7	15	1	24
Summer school	1	7	5	1	14
None	7	6	1		14
Full time	3	13	21	3	40
Part time	6	7	2		15
School text work	5	9	7		21
C—THE LIBRARY					
Seating capacity					
Under 25	1	1			2
26-50	2	6			8
51-75	3	7	12		22
76-100		2	6		8
Over 100		2	5	3	10
Office or workroom	3	13	19	2	37
Storeroom for magazines, text duplicates, etc.	4	10	12	2	28
Assistance					
Student	7	17	21	2	47
Clerical	1	1	5	1	8
Teacher	1	2	2		5
Professional			1	1	2

(Continued on next page)

THE JUNIOR HIGH SCHOOL

(Continued from preceding page)

SURVEY OF CALIFORNIA SCHOOL LIBRARIES

	Less than 500	500-1000	1000-2000	*Over* 2000	*Total*
Book collection					
Under 3000	3	9	14	1	27
3000-5000	1	5	8		14
Over 5000	3	5	2	2	12
Periodicals					
Under 10	1	1			2
11-20		1			1
21-30	3	5	2		10
31-40	2	6	9		17
41-50	1	1	6		8
Over 50		2	3	3	8
Appropriation					
Under $250					
$250-$ 500	4	1			5
$500-$ 750	1	11			12
$750-$1000		4	8		12
Over $1000		2	10	3	15
Final decision on book orders					
Superintendent		3	5		8
Principal	4	10	8	1	23
Supervisor	2	2	3		7
Censorship committee		2	10	2	14
Librarian	1	5	6	1	13
Libraries under supervisor	5	11	14	3	33
Supplementary texts allowed in library	5	5	8	1	19
Training for student assistants	5	10	17	3	35
Credit (academic)	3	7	16	2	28
Library instruction for student body	6	18	22	3	49
Free reading allowed	4	15	17	3	39
Regular use of library for study hall over-flow	2	6	2	1	11
Regular class assignment to library	5	10	2	1	18
Teacher responsibility for book losses	5	8	10	2	25
Bibliographical work for faculty	3	4	10	2	19
Exhibits	6	13	19	2	40
Library clubs	4	11	11	1	27
Public library cooperation	6	12	14	2	34

NOTES:-

1. Three (3) schools who replied stated that they had no libraries.
2. Several omitted answers to certain questions.

*1. Refers to *library* training in addition to college training.

*2. It is possible that the smaller schools reporting large collections included texts.

*3. An objectionable practice resulting from the prevalence of supervised study.

MUSIC INSTRUCTION IN THE HIGH SCHOOL*

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IN THE brief time alloted to the discussion of high school music instruction, it is manifestly impossible to suggest anything but the merest outline of the subject. The paper, therefore, will be confined to a statement of results rather than explanations of technique and procedure of obtaining the facts of the study. It is the purpose of this presentation to set forth very briefly, information concerning the following points:

(1) The rise of music instruction in the high school curriculum.
(2) The present extent, types and credit allowed for music instruction.
(3) Present day courses of study in the large cities.
(4) Summary of present tendencies.

The Rise of Music Instruction in the High School Curriculum. It is true that both vocal music and some instrumental music were a part of the programs of study of some of our early academies, but music instruction of any great extent and importance in secondary education dates from 1906. Boston is often mentioned as the cradle of public-school music in America, but music instruction was not introduced into its high schools until 1872, thirty-five years after the first adoption in its lower schools. Definite mention is made of the establishment of music-teaching in the high schools of Chicago in 1848, of Cleveland in 1851, of Providence in 1856, of Cincinnati and St. Louis in 1858, and of Lowell in about 1870. The work was usually chorus or assembly singing once or twice a week and was not considered of sufficient importance to warrant regular school credit. Its status remained practically the same until after 1906. Even at this late time there were but few schools offering music instruction of a more serious character than mere group singing. Cambridge offered a course in harmony, and, on the strength of its success, Boston and Worcester experimented with it as a high-school subject. Springfield, Massachusetts, had a course in harmony with credit and a course in music appreciation without credit, while Northampton offered in addition to harmony, a course in voice culture with credit. In 1900 there were in the schools of Pennsylvania less than 100 music supervisors, a band or two and not more than two dozen orchestras.

Mr. George H. Martin, Secretary of the Massachusetts Board of Education in 1904, made an inquiry into the status of music in the high schools of his time. He found that while music was taught by all but a very few of the smaller schools in Massachusetts, it consisted almost entirely of chorus singing. Few schools reported any work in musical theory or individual work in voice training. Reports showed substantially the same

* A paper read before the curriculum section at the meeting of the California Educational Research Association, held at Stanford University, April 12, 1929.

conditions existed in other New England States as in Massachusetts. The facts representative of the Western States as presented by Mr. Martin are as follows:

> In Minnesota music is said to be taught in about 75 per cent of the 163 high schools, but by special teachers in only 20 per cent. . . . In Michigan music is taught in only a few of the larger high schools. The work is said to be not closely related to the work below. In Ann Arbor the high schools offer a special course in preparation for the University. . . . In Saginaw credit is given for work done outside. In Nebraska . . . music is taught in about one-third of the high schools of the State by special teachers. . . . In Illinois . . . in only 10 of the 300 high schools does music receive sufficient attention to be included in the list of subjects taught. . . . In a summary of the whole number of school hours given to each subject in all the high schools of the State, while Latin and algebra have each more than 100,000 hours, music is credited with only 760 hours. Few special teachers are employed.[1]

The impetus given its rapid development after 1906 came largely through the organized effort of the New England Education League in securing the consent of the College Entrance Examination Board for the New England and Middle Atlantic States to add music to its list of subjects, and in June, 1907, the first set of examination questions was issued. Questions were written for music appreciation, harmony, counterpoint, voice, piano, and violin. Before this but five colleges allowed entrance credit in music. In 1919, of 419 universities and colleges in the United States (72 per cent of all universities in this country) 81 allowed one unit as entrance credit and 113 allowed two or more, while 76 allowed credit in applied music.

The Present Extent, Types, and Credit Allowed for Music Instruction. In 1922, 989,591 or 45 per cent of the total high school pupils in the school census of 1920, received music instruction. This figure is based on 1702 cities reporting, or 61 per cent of the total number of cities according to the 1920 census. Forty-eight per cent of the total high school enrollment of the cities studied by the National Research Council of Music Education in 1922, received music instruction. These cities employed 1507 special supervisors and expended $4,975,211 on musical education. Some of this instruction is meager, to be sure, but of 359 cities reporting to the United States Bureau of Education in 1919, 43 per cent required chorus; 90 per cent required assembly singing; 58 per cent had boys' glee clubs; 71 per cent had girls' glee clubs; 77 per cent had orchestras; and 35 per cent offered class work in harmony. A large majority of these cities actually allowed school credit for this work. More recently (1927, to be exact) the writer collected data from forty cities having populations of 50,000 or more and representing twenty-one of the forty-eight states.[2] The survey is representative only of the metropolitan centers. The extensiveness of the offering in music is shown by *fifteen* distinct types of work. Within these divisions many combinations and segregations for purposes of adaptation appear. Chorus work, which includes general class

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[1] Boston Public School Document No. 2, Sixty-eighth Annual Report of the Board of Education, 1903-1904, pp. 156-157.

[2] Reported in *School Review*, June, 1927, vol. XXXV, pp. 452-457.

work in vocal music, is given in some form in all the forty cities. A large number of the cities offer the three separate types of work, that is, boys' chorus, girls' chorus, and chorus for boys and girls together. The tendency is to require it in the junior high school but to make it elective in the senior high school. The time allotment is fairly uniform throughout but shows an increase in the eleventh and twelfth grades, where nearly all the cities give credit for the work. The amount of time for chorus work for boys and girls separately ranges from 40 to 110 minutes a week from the seventh grade to the tenth grade, inclusive, while the amount of time for mixed chorus work ranges from 40 to 225 minutes a week throughout the junior and senior high schools. The maximum for boys and girls separately is increased to 200 minutes a week in the eleventh and twelfth grades.

Appreciation as a separate course appears more commonly in the junior high school than in the senior high school. The tendency, however, is to make it a part of other courses, as shown by its combination with harmony, history, and theory. It was also mentioned many times as a part of chorus work. History, harmony, theory, and the combinations with appreciation apparently belong largely to the senior high school, where credit is given, usually comparable to that given for other school subjects with equal time requirements.

Orchestras are maintained in thirty-one of the forty cities in the first two years of the junior high school and in all but one city in the ninth grade. Thirty-seven of the forty cities report orchestras in the senior high school, and thirty-two of these thirty-seven cities allow credit for the work, devoting approximately two fifty-five-minute periods a week to it. The range in time is from 40 to 300 minutes a week for all grades. The few schools devoting an hour each day offer the full five-hour credit.

Bands are maintained in seventeen cities in the seventh and eighth grades and in twenty-three cities in the ninth grade, while twenty-six of the forty cities reporting have bands in the senior high school. The credit and the time allotment are similar to those in the case of the orchestras.

The tendency in the glee clubs is to segregate the boys and girls, the senior high school placing much more emphasis on this work than the junior high school. Seventy per cent of the forty cities have both boys' and girls' glee clubs, while nearly one-half of the cities also have mixed glee clubs. Approximately 70 per cent of these cities allow credit for this work in the senior high school, to which an average of eighty minutes a week is devoted. The time allotment ranges from 30 to 90 minutes a week for the seventh and eighth grades and from 40 to 200 minutes a week for the grades from the ninth to the twelfth.

School instruction in piano, voice, and violin is not common, but is rapidly gaining a place in the music course. Seven cities offer violin in the seventh and eighth grades and five in the grades from the ninth to the twelfth. Piano and voice belong primarily to the upper grades, according to practice. Classes in instrumental music, which include the violin, are offered by seven cities in the senior high school. Credit for this work is not usually granted, perhaps because, in some cases at least, these classes

are "feeders" for orchestras or bands, in which the members are required to take part and for which they receive credit.[3]

Clubs other than glee clubs and chorus are not common. Those mentioned are banjo, ukulele, piano, operetta, and appreciation clubs.

Applied music is recognized in four cities in the seventh grade and in five cities in the eighth grade; fourteen cities allow credit in the ninth grade. It is recognized in the senior high school in nearly one-half of the cities reporting.

It is interesting to note the cleavage between the eighth and ninth grades which still exists, although most of the cities reporting have adopted the 6-3-3 plan of organization. The ninth grade as the most psychological dividing point in secondary education is not apparently fully recognized in the offering of music instruction.

From this description of practice, it is safe to conclude that music in the secondary school is rapidly gaining a status comparable to that of other subjects in the curriculum. It is no longer the mere group singing of a past generation or the extra-curriculum activity of a few years ago but a *regular* high school subject, in many cases carrying full credit and receiving sufficient time and attention to make its teaching stand out as distinctly worth while.

Present Day Courses of Study in the Larger Cities.[4] That music instruction no less than other subjects of the curriculum is undergoing an evaluating process is indicated by the fact that of forty-four cities reporting, all but seven had courses of study, and of the thirty-seven having such courses in use over half were under process of some revision. From an analysis of some twenty courses, in most cases formulated within the last few years, it is strikingly evident at the outset that music instruction in the modern high school is in no way suffering from the withering monotony of uniformity either of materials or methods of work, but the converse bears witness to such extensive diversity that apparently practice may be termed chaotic in the sense that to the layman music has no program upon which there seems to be much agreement. The teaching of appreciation, which is practically a universal feature, may be suggested as illustrative of this statement. An attempt was made after analyzing courses on this point to construct what might be termed "organizing principles" around which to classify the materials of the teaching of appreciation. It was found that most frequently courses were dominated by vocal or instrumental form or design; or historical perspective—that is, music in relation to the classic, romantic or modern periods of history; or biographical—that is to say, the chronological study of the lives and works of great composers. Technic, "nationality" or the study of instrumentation is less frequent as an organization idea.

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[3] A more extended treatment of credit allowed for music instruction has been reported in *School and Society*, March 10, 1928, vol. XXVII, pp. 306-308.

[4] Exact citations to all materials mentioned under this heading may be noted in *School Music*, March-April, 1928, pp. 3-8.

The history of music as a separate study occurs in but four of forty cities recently studied. Attention is given it most frequently in connection with appreciation. The desirability of such correlation was early expressed by music educators, and Mr. Earhart recommended closer connection of courses in harmony, appreciation and history, even with instrumental study. Before this, arguments were advanced for the history of music in the high school as a "cultural" subject to parallel the history of literature. Although there apparently developed no opposition to such a demand, its presentation gained little popularity, as shown by Earhart's survey of 1914. Of forty-nine schools, but seven offered the history of music as an academic subject, while the remaining forty-two offered it in combination with appreciation or incidentally with chorus work.

Of the courses examined, the technic of music is studied under a variety of titles, indicating no settled organization or principle for the presentation of this material. The courses mentioned most frequently were given under such captions as "Elementary Theory," "Theory of Music," "Sight-Singing and Music Theory," "Harmony," "Harmony and Ear Training," "Elementary Harmony," "Advanced Harmony," "Fundamentals of Music and Elements of Harmony," "Ear Training and Melody Writing," "Music Appreciation and Harmony," "Music Understanding and Appreciation." The title "Harmony" designates the academic course in music in eight instances, the greatest frequency of the titles given. Seven courses of study show an elaboration of materials for outside study of voice or instrumental work and also for such offering within the school. Birmingham, Alabama, offers four years of voice culture or piano in addition to many other types of instrumental study which are not outlined in detail. Buffalo, New York, allows school credit for the outside study of voice or any instrument and gives a detailed outline of general and specific requirements for eight years of both piano and violin study. El Paso, Texas, outlines an elaborate course in applied music of four years for voice, violin, and piano. Lansing, Michigan, offers a four-year course in violin in addition to the granting of credit for outside study of voice or orchestral instruments. The New York course in music presents a detailed four-year outline in voice training which is the most comprehensive in that field of the courses examined. Los Angeles includes specific materials, both basic and supplementary, for applied music work in voice, piano, pipe organ, violin, cello, and stringed quartet. Stamford, Connecticut, arranges a concise outline for four years' work in piano and violin under private teachers. Reports to the school are required from the teacher, including "technical progress," "composition studied," and "quality of work done."

A close study of the materials in these courses reveals no common elements or basis of organization. They are as diverse as there are different courses represented. While too narrow standardization of such courses is undesirable, attention must surely be paid to securing a proper amount of organization of materials, whatever the offering.

The prob'm of method in relation to content and aim is little in evidence in present day courses of study. A few give scant attention to the question, though direct suggestions on the means of attaining a specific goal with a given content. A clear example of this point is that contained in the New Work course with reference to sight-singing:

> All teaching of sight-singing should be based upon the song. Theoretical points should be taught in their direct application to the song. The reverse method of teaching rudimentary or theoretical points and then applying them to the song should not be employed. To attain this end, songs should be sung at sight with words, the class reverting to singing names as a means for correcting mistakes and not as an end in sight-singing.[5]

Of similar significance are the suggestions given in the San Antonio course:

> (1) Explain technical difficulties as they appear in the month's work.
> (2) Study into the lives of the leading composers as they occur.
> (3) Gradually introduce the more intricate musical problems.
> (4) Have children do reference work such as looking up operas, composers, etc., and give reports on their work.

These examples of method will suffice to illustrate the possibility and necessity of specific application of educational principles to class room procedure. Too often the teacher, however well trained, loses perspective through the necessity of routine, and principles degenerate into mere devices for the accomplishment of the immediate exigency, irrespective of larger ultimate attainments gained through the constant application of fundamental conceptions of development.

A wide diversity of practice, both with respect to content and purpose of secondary school music instruction, is exemplified in the foregoing presentation of materials from current courses of study. While it is possible to classify, on a fundamental basis, the materials of appreciation, yet there seems to be little tendency at a uniform practice with respect to its teaching. That it is felt to be of utmost importance is demonstrated from its almost universal inclusion in secondary school curricula. The status of "academic" courses in music also lacks certainty of organization. The past has, of necessity, claimed the attention of the music director and supervisor with administrative problems and with the business of gaining a status for music in the secondary school curriculum. The future of this position lies in the path of professional improvement and achievement—that is to say, one of adjustment to changing conditions, of analysis of learning processes with accompanying improvements in teaching technique, of the perfection of supervisory practices, of attention to the more

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[5] *Course of Study*, New York, 1921, p. 9. The teaching of "Key Signature", "Minor Mode", "Dictation and Ear Training", are similarly discussed.

accurate measurement of results and a more general recognition and use of the value of research for the solution of pressing problems.

Summary of Present Tendencies. 1. Music in the high school curriculum is rapidly losing its extra-curricular status and gaining a place comparable to that of other subjects in time and credit allowance.

2. The offering in music instruction is rapidly expanding from group singing to include individual and group instruction in voice, violin, piano and many other types of instrumental work.

3. While courses of study in music are undergoing considerable revision, there is apparently confusion as to the proper organization and content of courses.

4. Time allotment and credit allowance show a wide variation of practice and suggest the need for a more universal agreement as to a basis for assigning credit and apportioning time expenditure to music instruction.

5. The cleavage between eighth and ninth grades, as far as music instruction is concerned, still exists to a large degree, although most cities studied had adopted the 6-3-3 plan of organization.

6. Music instruction must be credited with considerable progress in correlating the materials of its instruction as shown by the scarcity of purely academic courses and the inclusion of these in its application courses. This point may well be emulated by many of the time-honored subjects of the program of studies.

Allow me to make one more point in closing. If some of the remarks made in this paper seem somewhat discouraging to those devoting themselves to music instruction in our high schools, then let me remind them that these same criticisms may likewise be made of some of the subjects of long standing.

REPORT CHANGE OF ADDRESS

Subscribers are urgently requested to give notice of change of address. All Associate Members now on the mailing list are entitled to the October number of THE QUARTERLY. To insure delivery of the October number, notice of any change of address should be given prior to October 1.

AN EXPERIMENT WITH TENTH YEAR TERMINAL COURSES

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TENTH year terminal courses were started at Portola Junior High School, San Francisco, in August 1928. The curriculum was drawn up by a representative committee of teachers, principals, and members of the Superintendent's staff, who had the advantage of counsel from Professor William M. Proctor of Stanford University. The definite objective was that of furnishing a program fitted to the capacities and needs of an over-age group that, according to anticipation, would have been entering upon the last year of school experience. The curriculum prescribed courses in English —five hours per week; physical education—three hours. It also required a "major" of ten hours per week in one department, (industrial arts for boys, home economics for girls, commercial work, art, or music). The remainder of the pupil's time was left open to free electives, except that one hour per week was reserved for clubs. (The daily schedule consists of six periods of 60 minutes each in length, with an additional hour for lunch).

The accompanying tables tell the story of the educational outlook of Portola students of this type prior to the inauguration of the terminal courses, as well as at the end of the first year's trial of these courses.

By way of interpretation of the tables the following facts may be noted:

The Portola Junior High School was organized three years ago on a 7th, 8th, 9th year basis. It has had a total of 318 graduates (six classes), of whom 143 entered the tenth year of senior high school. Of the 143 pupils, 64 dropped out of high school during the tenth year. Not all of them dropped out on the score of health. Eight of them had failed in two terms to do the work of one term; nine others, to complete in three terms the work of one term; and one other, to accomplish in two years the work of two terms. The evidence seems to indicate that the 66 drop-outs did not fit into the offerings of the regular high schools.

It was for the benefit of youth of this type that the experiment with tenth-year terminal courses was begun at Portola.

The situation at the end of the initial year of trial may be summarized as follows: Of the 33 pupils enrolled ten months ago, 30 are still in regular attendance. Not one of the 30 has registered a failure. The scholarship attainments of the group are as good as the average of the whole school, and the percentage of attendance better than that for the whole school. Sheet metal, printing, auto shop, and wood work have been most popular with the boys. Commercial work—including shorthand, junior business training and typewriting, have proved most attractive to the girls. Of the

30 pupils, 17 are so encouraged by their achievement that they now wish to go on to senior high school, though all of them planned last August to quit at the end of this year. The opportunity has meant, for these pupils at least, success instead of failure; hope instead of discouragement; social adjustment instead of maladjustment.

The plan outlined above has been made operative for another year at Portola. It is possible that it will be extended into two other junior high schools in which parallel conditions exist.

DISTRIBUTION OF PORTOLA JUNIOR HIGH SCHOOL GRADUATES AS OF MAY 1, 1929.

(*Does not include those who went to Part-Time School*)

TABLE I.

HOLDING POWER OF TERMINAL COURSES

No. Registered	*In School*	*Out of School*	*Percent In*	*Percent Out*
Senior High, 143	77	66	53	47
Portola, 10th year, 66	57	9	87	13

TABLE II.

DISTRIBUTION BY TERMS OF PORTOLA JUNIOR HIGH SCHOOL GRADUATES WHO DROPPED OUT OF SAN FRANCISCO SENIOR HIGH SCHOOLS AND OF PORTOLA JUNIOR 10TH YEAR

Senior High				A	47	
					Low 10	*High 10*
					Low 12	*High 12*
					Low 11	*High 11*
Left during term or at close but not failed	15	7	----	----	----	----
Left, failed, not repeated	17	1	----	----	----	----
Left, failed, repeated 1 term	8	4	----	----	----	----
Left, failed, repeated 2 terms	9	2	1	----	----	----
Left, failed, repeated 3 terms	----	1	1	----	----	----
Total	49	15	2			
Portola						
Left during term but not failed	7	2	----	----	----	----

Mental-Educational Survey of Junior College Students

Stanford University is planning a mental-educational survey of Junior College students in California, to be conducted this Fall by Dr. Walter C. Eells, associate professor of education. The plan has already been accepted by forty Junior Colleges, both public and private, involving over 12,000 students.

Thurstone's Psychological Examination for College Freshmen and High School Seniors will be used as the ability test, while the Iowa High School Content Examination will be the basis of the achievement test. The tests will be furnished by Stanford University, but their administration will be by officers of each Junior College.

The object of this mental-educational survey is to make comparisons of ability and achievement of Junior College students working in the different types of Junior Colleges, both public and private, and to lay a scientific basis for the study of guidance of students and for curriculum re-organization.

TEACHER LOAD IN LOS ANGELES

This report on TEACHER LOAD IN LOS ANGELES was submitted on request of the Editor by Miss Helen Babson, Chairman of the Teacher Load Committee of the Los Angeles Principals' Club. In submitting the data Miss Babson says: "I believe this table is used by principals in the various schools as a guide rather than as an absolute formula for teacher assignment."—EDITOR'S NOTE.

FOR THREE AND FOUR YEAR HIGH SCHOOLS

Subject	*Periods Per Week of Teaching*	*Range of Teacher Load Per Day*
English	25 periods	125 to 160 pupils
Laboratory Science	28 to 30 periods	100 to 130 pupils
*Shop	40 periods	60 to 80 pupils
Home Economics	30 to 40 periods	60 to 120 pupils
*Mechanical Drawing	40 periods	No range suggested
Music	25 to 30 periods	No range suggested
Commercial	25 to 30 periods	125 to 225 pupils
Art 2	30 to 40 periods	No range suggested
Regular academic subjects requiring prepared work as Hist. Math, etc	25 periods	125 to 175 pupils
Physical Education	30 periods	250 to 300 pupils

FOR SIX YEAR HIGH SCHOOLS

Subject	*Periods Per Week of Teaching*	*Range of Teacher Load Per Day*
English	30 periods	125 to 175 pupils
Laboratory Science	28 to 30 periods	100 to 130 pupils
*Shop	40 periods	60 to 100 pupils
Home Economics	35 periods	60 to 120 pupils
*Mechanical Drawing	40 periods	No range suggested
Music	20 to 30 periods	No range suggested
Commercial	30 periods	125 to 225 pupils
Art (3)	30 to 40 periods	No range suggested
Regular academic subjects requiring prepared work as Hist, Math. etc	30 periods	125 to 175 pupils
Physical Education (4)	30 periods	250 to 300 pupils

FOR DEPARTMENT HEADS

Basis	*Periods Per Week of Teaching*	*Range of Head Load Per Day*
3-7 teachers	4 or 5 classes	Student load to depend on size of school, character of department and outside demands
8-14 teachers	3 or 4 classes	
15 or more teachers	2 or 3 classes	

***The Association of Shop Men wish to make, through this Committee, a protest against this teacher load. They asked that they be permitted to state their objections to whatever body this group is willing to designate to hear them.**

NOTE: For shops and home economics departments where double periods are carried, the teacher load should be proportioned. For example, with a department of from three to seven teachers, a head's load would be 3 or 4 double period classes. Art and Music are to be considered the same as academic classes.

The Committee further suggests that wherever it is possible, department heads be spared from study hall duty and be relieved from home-room duties.

NEW PLAN OF ADMISSION TO THE UNIVERSITY OF CALIFORNIA

THE University of California has announced a new plan of admission, effective in August, 1931. By this plan the University will assume full responsibility in admitting freshmen, and high school principals will no longer be called upon to make recommendations as to the ability of the student. The new requirements are as follows:

A. Evidence of the candidate's graduation with not less than 15 units of credit from an accredited secondary school of California.

B. Candidate must have completed in the high school the following subject requirements:

(a) History, 1 unit.

(b) English, 3 units.

(c) Mathematics (elementary algebra and plane geometry), 2 units.

(d) Chemistry, or physics, or biology, or zoology, or botany (if a third year or fourth year subject with laboratory), 1 unit.

(e) Foreign language (in one language), 2 units.

(f) Advanced mathematics, or chemistry, or physics [if not offered under (d)]; or additional foreign language in the language offered under (e) (if in another foreign language, 2 units will be required), 1 (or 2) units.

(g) Electives from the following list: History, English, mathematics, natural science, foreign language, drawing, 2 (or 1) units.

(h) Unrestricted electives, 3 units.

Total required for admission, 15 units.

C. In addition to the subject requirements stated in B, a graduate of an accredited secondary school in California will be required to present a properly certified high school record of grades "1" or "2" in at least 10 of the 12 units specified in B under (a)-(g) inclusive. No grade lower than "3" will be accepted as part of the 15 units required for admission. This regulation is based on a grading system comprising four passing grades. The Board of Admission is given authority to evaluate other systems.

Deficiencies in either the subject requirements of B or the grade requirements of C may be removed by passing examinations of the College Entrance Examination Board.

Candidates whose high school program has conformed to the subject requirements listed in B may, at the discretion of the Board of Admissions, be admitted upon passing, in a single College Entrance Examination Board period, a series of examinations representing three distinct fields of study:

(1) The examination subjects must be so chosen as to represent two of the following fields: mathematics, science, foreign language.

(2) The subject of the examination in a third field may be chosen from items (a)-(e) as listed in B, but must represent an item other than those chosen to represent the first two fields. This amendment is to be effective immediately.

THE QUARTERLY AND THE PROGRESSION
(A SYMPOSIUM)

In the three articles here following, Principals and Teachers will find some valuable suggestions on professional growth in service.

Mr. Martin writes briefly on "Professional Faculty Meetings," and suggests how the CALIFORNIA QUARTERLY *of Secondary Education may be used to make these meetings interesting and valuable.*

Mr. Ewing points out uses of THE QUARTERLY *to teachers in summer sessions and extension work. A professor of education on one occasion stated that a teacher who habitually read* THE QUARTERLY *would do more for herself professionally than many teachers do in attendance at a summer session. And the cost would be nominal.*

Mr. Farris gives a detailed statement of the plan used in the Alexander Hamilton Junion High School of Oakland, in securing membership in professional organizations. As a result of this plan the Alexander Hamilton Junior High School has been about 100% for a number of years in all the professional organizations listed in its professional budget. This statement by Mr. Farris indicates the value of the budget system. No other method of successfully handling membership in professional organizations has yet been discovered.

The problem of teacher membership in professional organizations is not the amount of the fees involved. This item has been shown repeatedly to be less than in any other professional group, or in the trades, where compensation is no greater. The problem does not inhere in an unwilling attitude on the part of the great mass of teachers to support professional organizations. The problem is one of leadership and method. It is a principal-teacher problem, wherein the teachers rightfully look to the principal for leadership. The promotion of teacher membership in professional organizations is one of the fundamental elements of professional leadership in every principal. This statement does not imply any spirit of compulsion on the part of principals. Leaders move ahead of the column.—Editor's Note.

PROFESSIONAL FACULTY MEETINGS

HOMER MARTIN
Principal, Santa Barbara High School

THE California Quarterly of Secondary Education offers good material for faculty meetings.

The old type of faculty meeting, which is called regularly and must endure for the prescribed two hours, whether there is work to do or not, is fortunately passing. Most of the problems formerly handled in such meetings are now better attended to by small committees or by a principal's advisory council elected by the faculty.

The main object of the newer type of faculty meetings is to stimulate the professional growth of teachers and principal. A large part of each meeting should be devoted to this purpose, or better yet, entire meetings can be regularly scheduled as "professional faculty meetings." For such meetings the California Quarterly furnishes a wealth of material throughout the year.

These professional meetings are usually more democratic and effective when they have been arranged by a faculty committee, often a year ahead.

The program can be as intensive or as varied as the faculty wish to make it. Sometimes a professional book is carefully studied, the chapters being reviewed by various members of the faculty, who also lead in the general

discussions which follow. Other books and magazine articles may be given only a short review at one meeting.

Very interesting and profitable material for professional meetings are the findings of research committees, and the study and discussion of those printed in the California Quarterly are invaluable to California teachers.

In this way principals and teachers become acquainted with new problems in their own schools and are able to bring to their solution the experiences of principals and teachers in other places.

CALIFORNIA QUARTERLY OF SECONDARY EDUCATION ONE OF THE MOST USEFUL PUBLICATIONS IN ITS FIELD

WILLIAM F. EWING
Assistant Superintendent of Schools, Oakland

ROWING teachers read current periodical literature. On account of the limited time that most teachers have for this purpose, a choice of professional journals is necessary. Of numerous educational publications that regularly come to my attention, I consider the CALIFORNIA QUARTERLY one of the most valuable.

The QUARTERLY contains timely articles written by successful teachers who know the problems of secondary schools. Among the contributors we find classroom teachers, counselors, deans, vice-principals, principals, superintendents, and college professors.

Unlike many professional magazines the QUARTERLY has many articles of more or less permanent value. Teachers who are contemplating summer session courses or extension work will find the QUARTERLY a source of valuable information, as well as a guide to the best practices in the most progressive secondary schools.

The wide range of articles published by the QUARTERLY since its appearance about four years ago may be seen from a random selection which follows:

October 1925

Recent Developments in the Junior High School Field—James M. Glass.
Education to Meet the Needs of Modern Life—Will C. Wood.
Status of Science in the Public High Schools of California—Elizabeth L. Bishop.
A Social Program in the Junior High School—Alice Ball Struthers.

January 1926

Conferring Scholastic Honors on High School Students—Kathleen D. Loly.
Personality Traits and the College Success of High School Graduates—W. Hardin Hughes.
A Selected and Annotated Bibliography on Standardized Tests for Secondary Schools—Frank C. Touton.

April 1926

An Analysis and Interpretation of the Report of the Classical Investigation—Esther Jean Spencer, Anne E. Edwards, Doris M. Bibbins.
Some Criticisms of English Teaching—Geoffrey F. Morgan.
Recent Tendencies in Junior High School Music Education—Frances Wright.

June 1926

Training of High School Teachers in Relation to the Subjects They Teach—W. W. Kemp.
Organization and Administration of the Public Junior College—John W. Harbeson.
Responsibility of Department Heads for the Improvement of Instruction—Arthur Gould.
The Counseling Function in High School—Walter R. Hepner.
Responsibilities of the High School Principal—Merton E. Hill.

October 1926

The Status of Secondary Education in California—Albert C. Olney.
Pageantry as Community Service—Roger Sterrett.
An Analysis of the Work of a Stenographer—Earl W. Barnhart.

January 1927

A Self-Expression or Development Department—Isabel McReynolds Gray.
The Training of Teachers for the Junior High School—Willard E. Givens.
Modern Tendencies in Commercial Education—J. Hugh Jackson.
Studies in Secondary Education: The Role of Objectives in Secondary Education—Frank C. Touton.

April 1927

Social Studies as the Core of the Junior High School Curriculum—Charles H. Judd.
The Articulation of the Junior and Senior High School—Jesse H. Newlon.
Science Interests of Junior High School Pupils—Leonard W. Welch.

June 1927

An Analysis of the Classroom Practice of 210 Teachers of Modern Foreign Language—George A. Rice.
Abnormal Behavior in Children—Vaclay Podstata.
The Problem of Children Handicapped by Speech Defects and Disorders—Mabel Farrington Gifford.

October 1927

A Study of Supervisory Practice in the University High School, Oakland.
The Curriculum Revision Program in the Long Beach City Schools.

January 1928

High School Libraries in California—Faith E. Smith.
The Need for Terminal Courses in the Junior College—Nicholas Ricciardi.
The Attendance Problem of the Evening School—Edith Everard Roche.

April 1928

The Relation of the Public Schools to Higher Education—Susan Miller Dorsey.
The Project as a Curriculum Technique—Lester Alonzo Williams.
An Investigation Into the Individual and Social Values to be Derived from a Formal Course of Character Training in the Junior High School—Zelma Langdon Huxtable.

June 1928

The Problem Boy—Joseph M. Sniffen.
University Records of Students from Junior Colleges—Walter Crosby Eells.
Some Fundamental Problems in the Improvement of Commercial Education—Frederick J. Weersing.

October 1928

Fundamental Concepts Underlying Junior College Education—Ernest Carroll Moore.
Trends in Junior College Enrollment in California—Walter Crosby Eells.
Qualities That Students Admire in Teachers—Florence Ryle.

January 1929

Hoover's Faith in Education—William Hard.

The Problems of Articulation Between the Elementary and the Junior High Schools—George E. Mortensen.

Some Modern Procedures in Junior-College and Lower-Division Education—Rufus B. von Kleinsmid, Frank C. Touton.

April 1929

Some Handicaps of Character Education in the United States—William C. Bagley.
Duties of Boys' Vice-Principal—A Symposium.

A Survey of California Senior High School Libraries—Estelle D. Lake, Elizabeth Neal, Florence Baker.

The Tulare Guidance Program—David L. McKaye.

ENROLLMENT IN PROFESSIONAL ORGANIZATIONS THE ALEXANDER HAMILTON JUNIOR HIGH SCHOOL PLAN

Reported by L. P. Farris, Principal
and Special Membership Committee

AT A faculty meeting held early in each school year the principal of the Alexander Hamilton Junior High School names a Committee on Enrollment in Professional Organizations to serve for the year. This committee usually reports at the following faculty meeting, recommending a list of the professional organizations in which the faculty as a whole should procure memberships. At this meeting, after the chairman of the committee has pointed out what each organization has to offer, a full discussion by the faculty follows. The committee then makes a recommendation that each member of the faculty individually apply for membership in the organizations and this recommendation has always been accepted by the faculty as a whole.

The above plan has been effective in stimulating memberships in local, state, and national professional organizations, and the committee, through personal work, often has been instrumental in pursuading a few individual faculty members to take memberships in organizations in which they at first were apparently not interested.

The following form is distributed among faculty members, who fill out the blanks as per instructions, filing them with the school treasurer who, in due time, collects from each member as per the agreement.

To the Faculty:

Realizing that the best basis for professional recognition by the community is a highly developed solidarity among the teachers themselves for professional purposes, the committee recommends that every teacher hold membership in the following professional organizations.

Respectfully submitted,

COMMITTEE ON ENROLLMENT IN PROFESSIONAL ORGANIZATIONS.

ORGANIZATIONS

1.	C. T. C. (Sierra Educational News included)	$ 3.00
2.	California Society of Secondary Education (California Quarterly included)	2.00
3.	N. E. A. (Journal included)	2.00
4.	Oakland Teachers' Association	1.00
5.	Parent Teachers' Association	1.00
6.	Faculty Fund	1.00
7.	Alameda County Educational Association	.25
8.	Oakland High School Teachers' Association	.25
	TOTAL	$10.50

STRICTLY MEN'S ORGANIZATIONS

1.	California School Masters' Club (new members)	1.00
2.	East Bay School Men's Association	.50

TEACHERS NEW TO OAKLAND

Initiation fee to new O. T. A. members ..... .50

OPTIONAL MEMBERSHIP

1.	O. T. A. Sick Benefit Insurance	5.00
2.	O. T. A. Sick Benefit Insurance (new teachers)	6.00
	GRAND TOTAL	

I hereby authorize the school treasurer of Alexander Hamilton Junior High School to enroll me and to pay all necessary dues of the school year 1928-29 as follows:

(Yes or No)

1. In all the eight organizations as listed .....
2. In only the organizations with (′) after them .....
3. In the East Bay School Men's Association .....
4. In the California School Masters' Club .....
5. In the O. T. A. Sick Benefit Insurance .....
6. I am a new member of the O. T. A. .....
7. I have already paid my dues in the organizations after which I have placed an (x) .....

I hereby agree to pay the sum of ....., my total dues, by one check to the school treasurer, on or before October 1.

I hereby agree to pay the sum of ....., my total dues, in two installments by check to the school treasurer, as follows:

First installment of ..... on October 1.

Second installment of ..... on November 1.

.....

Teacher's Signature.

In this section of THE QUARTERLY *are published abstracts of some of the papers presented at the annual Convention of Secondary School Principals which convened in Oakland, March 25-29. We regret that space can not be given to many other valuable papers presented on the program and to a more complete account of the convention. Some of these papers will be published in the October number of* THE QUARTERLY.

The annual Convention of Secondary School Principals, which always includes the representatives of the State Department of Education and representatives from colleges and universities in the State, has developed into what is probably the most important and definitely significant educational gathering in California within the school year. It would, therefore, seem appropriate that ways and means should be found whereby a more complete report of the proceedings of this convention could be published for the benefit of all concerned and as a permanent record of achievement.

This Convention of Secondary Principals is held annually at great expense to the school departments of the State. Its value to those in attendance would be more than doubled by the publication of a carefully prepared report that would include the significant parts of the proceedings and all papers of distinctive merit read before the convention. In no other way can the constructive features of this annual gathering of educational leaders be made available to those not in attendance, or be preserved to the future.—Editor's Note.

THE NEW DAY IN SECONDARY EDUCATION

GEORGE C. JENSEN
Principal of Sacramento High School

THIRTY-EIGHT years ago there were probably not more than 300,000 pupils in our secondary schools, while today the total is certainly as much as four and one-half millions." Thus does Dr. George S. Counts announce the dawn of a new civilization. Couple to this the almost startling fact that "ninety percent of our people work with their hands," and we can hear the death knell of the exclusive academic secondary curriculums. May the day be hastened and even the forts of higher education successfully attacked!

Dr. Counts, at the Cleveland meeting, outlined seven great causes which are producing a new America and a new school. These swelling waters of the ocean of mighty historic events are ever rising higher. The external pressure has become so great that nothing within the schools can withstand it. Once again, as always, far-reaching educational change is being forced from the outside. Another short generation of the old aristocracy of abstract intellectualists and a new school will be with us—far more significant, far more human, and far more educational.

These seven armies that knock knowingly at our gates are the following:

1. The social ideal of equality of opportunity for all. This ideal is ground into the bone and fibre of America. Every individual, regardless of sex or age, shall be guaranteed the opportunity for that particular kind of education, and that amount of it, from which he can profit vocationally and avocationally. Nothing short of this is going to satisfy.

2. The extension of elementary education to the masses has given our people —rich and poor—a taste of the wonderful possibilities that lie in this direction. The sample has been enjoyable and profitable. These masses now, in ever-increasing numbers, demand full and properly balanced meals. Education, beyond the ele-

mentary school, must be adapted to all types of folks. (See Bull. Dept. Secondary School Prins., March, 1929, page 82.)

3. The unification of American society through transportation, communication, and other modern means, "Our society is bound together by a billion ties which multiply and grow stronger with every passing year." One of the most characteristic features of industrial society is that of integration. "In 1842 there were 4,000 miles of railroad in the United States. In 1920 there were 264,000 miles. In 1880 we had 31,000 telephones; in 1926 we had 16,900,000. In 1899 we had 4,000 motor vehicles of all kinds; in 1927 we had 22,000,000. The conclusion is forced upon us that during the last generation we have become the most integrated society of history." Secondary education is now geographically accessible.

4. The complexity of life and of occupations demands a different type of training than that of past generations. This is a type of technical and occupational training which the school alone can furnish all the people.

5. The tremendous increase in wealth and income has made it possible for the masses to send boys and girls to school beyond the grades. "During the five-year period from 1921 to 1926 our income increased almost fifty percent."

6. Decrease in the death rate has made it desirable and imperative to provide educationally for longer life. "Over one-third of the total burden of disease and early death which weighed upon the human race fifty years ago has been lifted from its shoulders."

7. Decrease in the birth rate has added greatly to the ability of parents to educate their children.

These seven social forces are demanding a new secondary school. Tomorrow they will demand a new university. The Medes and Persians are at the gates. If you and I as the present secondary teachers do not open the doors and answer the demands, history will again repeat itself and a new king will be upon the throne. "We may all wish to bring back the highly selective secondary school of history, but industrial society has decreed otherwise." That is perfectly evident.

Can we send back to the elements the electric energy which for generations, in the form of lightning, was useless to man, or will it continue to turn the great wheels of modern industry and to mould our actions? Shall our automobiles go back to the mountains of native metal and the gasoline back to the earth? Shall the railways, highways, radios, leisure hours, internationalism, flying machines, and democracy itself be thrown into the discard? If so, then by whom? The schoolmasters have no power here. All of our educational reforms have crept in from the outside, and will continue so to creep unless some day we shall become wise enough to anticipate mighty world movements and forces.

Thus it is that modern educational philosophy becomes a living thing. For ages the aristocracy of intellect, believing that the sum-total of all intelligence is abstract, have selected only their own academic kind to perpetuate educational life. Now comes a great change—the discovery that there are also social and vocational intelligences, and that these are equally important with abstract intelligence.

The old order passes, but it passes slowly, especially in the upper reaches of education!

The great objectives of education, as outlined by Dr. Hill are fundamental. If we can adopt these in California and put them to work we shall make a tremendous contribution to secondary education.

CURRICULUM PROBLEMS CONFRONTING THE CALIFORNIA SECONDARY SCHOOLS

MERTON E. HILL
Principal, Chaffey Union High School, Ontario
Chairman of the California Curriculum Commission

CURRICULAR problems face every principal, every teacher, every pupil, every parent. Curricula have been developed for one purpose only, and that is to bring each pupil, adolescent or adult, into fuller recognition of how he can accomplish his life purpose. The California Curriculum Commission is anxious to serve every secondary school in California. Its committee on Secondary Curricula recently submitted certain questions to the high school principals of the state. Two hundred and eighty-one replies were received and tabulated, and I have prepared a digest of the answers. The wish of the Curriculum Commission is to co-ordinate and make available for your use all of the curricular studies that are being made by schools, organized groups, and committees within the State, and we shall do our best to serve you.

A Philosophy of Secondary Education

We have a certain very definite point of view, and it is this: There should be developed in this period of educational reorganization *clearly defined ideals* regarding secondary education; we should establish very definitely a *philosophy of secondary education* that will fit California's present needs, that will challenge the support of every secondary teacher and administrator, and that will involve for his future's good every pupil, adolescent, adult, and parent within the reach of California's secondary school system. This philosophy of secondary education must come first; upon it must be built all curricular activity, and courses of study within each curriculum must conform thereto in theory and practice.

The Secondary Committee of the Commission, the State Director of Education, with the men on this morning's program, after considerable study of our problem, respectfully submit for your consideration, and as a basis for discussion, this philosophy for the secondary schools of California:

1. Each secondary school, whether Junior High, Senior High, or Junior College, should seek to reach every boy or girl, young man or young woman within its district through the medium of a curriculum adapted to the pupils' educational past and suited to their individual needs so that there will eventuate for them the fullest possible physical, intellectual, economic, vocational, social, and spiritual development.
2. Educational opportunity shall be denied none; there is no student, brilliant, mediocre, or handicapped, who cannot profit by some type of secondary educational effort.
3. Educational objectives should be clearly set forth for each subject.
4. The curricular offering should be made to each pupil on the basis of:
   a. His occupational objective (this will include abstract, social, and vocational intelligence.
   b. The highest type of his possible citizenship attainment.
   c. His physical welfare.
   d. The highest possible contribution he can make to society.
   e. The immediate pupil reaction to a given subject.
   f. His present interests.
   g. His assured immediate and probable future needs.

5. The secondary curricula should be developed to meet the immediate needs of all adults, and should supplement for them what the curricular offerings of their day failed to give them. Each secondary institution should be the center of a community going to school. It should attempt to satisfy all the important educational and avocational interests of the citizens and reveal to them the possibilities in the major fields of knowledge.

Restatement of Objectives

6. The seven "objectives" of "The Cardinal Principles" should be re-stated and enlarged somewhat as follows:

1929	1918
1. Training in desirable habit formation.	1. Health.
2. Mastery of the minimum knowledge, skills, powers, and attitudes essential to full participation in life's desirable activitives.	2. Command of fundamental processes.
3. Specific training in occupational techniques, and development of ability to be employed.	3. Vocation.
4. Preparation for and appreciation of the responsibilities of family life.	4. Worthy home membership.
5. Training in self-control, and in self-improvement, and in the development of avocational interests.	5. Worthy use of leisure.
6. Training for participation in home, economic and civic life.	6. Citizenship.
7. Training for right thinking to eventuate in right conduct; training the development of the social and spiritual.	7. Ethical character.
8. The pupil's program of school activities must supply all that his environment fails to afford, training in ability to modify and create environmental conditions.	

Will you not consider this re-statement of the philosophy underlying our secondary schools, and confirm, reject, or enlarge upon it? If we adopt it, let us cling to it as to a faith, and build new curricula or transform the old to conform to these principles.

Dr. Cubberley at Columbia Next Year

The trustees of Stanford University have granted Dr. Ellwood P. Cubberley, Dean of the School of Education, leave of absence for the college year 1929-30. Dr. Cubberley has accepted an appointment as Visiting Professor at Teachers College for the year. He is to assist Dr. Strayer and Dr. Englehardt in their course in School Administration, and will give a course in History of Education in the United States. Dr. Cubberley will return to Stanford for the summer quarter of 1930.

REPORT CHANGE OF ADDRESS

Subscribers are urgently requested to give notice of change of address. All Associate Members now on the mailing list are entitled to the October number of THE QUARTERLY. To insure delivery of the October number, notice of any change of address should be given prior to October 1.

CURRICULAR ADJUSTMENTS IN THE GENERAL CONTINUATION SCHOOL

(Abstract of Address)

HENRY O. DYCK

Principal, Metropolitan High School, Los Angeles

1. If it were possible to paint a picture of the continuation school it would be necessary to take into consideration that the boy or girl who attends this institution has definite ambitions, initiative, and also heartaches—the latter often are caused by the fact that he does not control the situation which brings about this disappointment so early in his life. Into this picture must be injected friendship, which the youth craves; sympathy, which he needs; and most of all, understanding. If the canvas is to convey the story of part-time youth in training, the parents, the instructors, the business men, in fact, everyone who is in contact with this institution, must create a pleasant and agreeable atmosphere. After the picture is completed there should be inscribed in a very conspicuous place these words: HE WHO WORKS HERE HAS A DEFINITE LIFE OBJECTIVE.

2. There are about as many reasons which prompt the youth to leave regular school as there are students. The primary object and privilege of those connected with the continuation school is to listen to the ambitions and plans of the youth and, if possible, direct him into the job which he loves to do. After employment has been secured it is essential that the instructor keep in close touch with the home and the employer, in order to arrange the course of study in such a way that the student, as well as the employer, will understand what can be done in four hours per week. After the youth is convinced that further mental development is necessary in order to progress on the job, it is a comparatively easy matter to re-arrange his course in order to help him to develop into the type of man he wishes to be.

3. At the present time we definitely are convinced that there is a weakness in the course of study in continuation education, due to the lack of continuity in the program and irregularity of attendance. If we are able to plan very definitely those phases which will directly help the youth on his job, we are beginning to solve the problem. As a matter of illustration, this situation may indicate what should be done. A student who is working as a bookkeeper or a statement clerk in an office, is given a definite project in his four hours of instruction, such as, The Importance of Overhead. When this youth returns to his employer and is asked: "What did you do this morning while you were in attendance at school?" he replies: "I have never known before what overhead expense means. I now understand that clerk's salary, light, rent, and other items go on regardless of the amount of business which is being done." When a youth reports this to an employer, the business man understands fully what is being done and appreciates the service of the continuation school.

4. Among the many important phases of continuation education are these—assisting the pupil *to get a job and to hold the job*, and arranging the course of study to meet the needs of the youth, so that he may continue to stay in his position. The final step is the most challenging. I refer to our responsibility to assist the youth *to progress on the job*. This latter is best accomplished by exposing the student to those subtle and finer influences which are not tangible, but are at the same time absolutely necessary to his advancement. Music, literature, development of a strong and pleasing personality, club activities and worth-while companionships, mean much to a young man who is anxious to climb. If we are able to accomplish all this, even in a small measure, we have begun to live up to the opportunity to serve the youth who works and attends school part of the time.

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CURRICULAR ADJUSTMENTS TO MEET THE NEEDS OF INDIVIDUAL PUPILS IN THE JUNIOR HIGH SCHOOL

By G. DARWOOD BAKER
Principal, South Pasadena Junior High School

IN A canvass of educational literature and the opinion of competent judges, made by Koos in 1920, it was found that the recognition of individual differences was rated as the most important justification for organizing a junior high school. While the junior high school probably has gone further in the recognition of these differences and done more to provide for the needs arising out of them than any other unit in our educational system, we shall have to admit that our skill in providing for individual needs has not kept pace with our ability to recognize differences.

The growth of the junior high school in this country closely parallels, in point of time, the movement for mental testing and the segregation of pupils into groups of comparable scholastic ability. Not so many years ago most of our educators confidently believed that once this segregation was accomplished the educational millenium would be upon us. By some strange metamorphosis, dull pupils would become articulate and competent when freed from the feeling of inferiority which the presence of bright pupils in the class gave them. I am sure, however, that there are none here who have not discovered that the segregation of pupils into groups of comparative homogeneity does not of itself solve any important educational problem. Indeed there are those in high places in the educational world who believe that it creates more problems than it solves. Perhaps we can all agree that grouping pupils of like school abilities together still leaves us faced with the necessity of adjusting to the needs of each individual and at most only makes that adjustment more possible.

What Have We Done About It? Almost everything, I should say, except vary the materials of instruction to meet the needs of the pupils being instructed. One common practice is to adjust the quality of achievement to the abilities and habits of the pupils. The principle of normal frequency distribution is being applied to segregated groups of widely different ability. A theme that will draw an "A" in a low ability group is worth a "C" in an average group and is rated "D" in a group of high ability. Practical administrators have accepted the achievement quotient, worked out by university professors and research workers, as a sort of rationalization of this procedure. Elaborate charts have been made to show the reduction of failures, but the only good result of the practice has been to protect pupils who were being urged to perform tasks beyond their powers from developing inferiority complexes. It does not touch the problem of individual or group needs.

Special Methods Must Be Devised. If we meet the individual needs of the pupils in our schools we shall have to *adapt* our *methods* of instruction to the mental functions of the individuals we attempt to teach. Many thought that teachers would make this adjustment automatically, if they were sent pupils grouped with relation to ability. However, we have found that teachers are not that resourceful. Careful observation will show that the great majority use the same teaching technique with bright, dull, and average groups. Teachers need instruction in the characteristic differences of bright and dull children and in the teaching methods and devices most adapted to pupils of varying capacity, and they will have to be supervised carefully by persons competent to help them, if any fundamental change in procedure is to take place. The present tendency is to write the methods to be used into the courses of study. To these should be added successful teaching devices, as fast as they are devised. Our profession lags far behind most others in its collection of practical tricks-of-the-trade.

Select Teachers Adapted to Special Groups. One way in which we can secure teaching methods adapted to group abilities is to take further advantage of the special abilities of our teachers. The general practice in planning a teacher's program seems to be to off-set a low ability group with a high one, a sort of *quid pro quo* arrangement. Would it not be more professional to select from among your teachers those rare individuals who have the skill and patience needed in dealing with pupils who have difficulty with our school subjects? These teachers should be trained for that work and specialized in it. I have teachers on my staff who, by their enthusiasm, exactitude, and the amiable cynicism which they bring to bear upon the efforts of their pupils, stimulate the most able pupils to their highest endeavor, but the slow pupils become discouraged and irascible under their tutelage. In the junior high school in South Pasadena we are going in for this adjustment of teachers to the ability of the group which they shall teach. Teachers are being selected especially for their ability to teach slow learners, and they are happy in their work.

Ability Grouping and Time Saving. One of the claims that used to be made for the junior high school was that it would save time for the brighter pupils and, therefore, money for the taxpayers. This constituted an adaptation to the needs of individual pupils of the time necessary to complete a given piece of work. Kansas City, St. Louis, Providence, and Rochester, to name only a few cities, are employing this adaptation with apparent success. The curriculum is built upon the standard needs and capacities of the average pupil, and he completes the course in three years. More drill, with frequent reviews, is given the slow learning groups, so that they are able to complete the course without failure or grade repetition in three and one-half or four years. Less drill, more difficult problems, and less time on each unit is the assignment for the fast learning groups. They complete the junior high course in two or two and one-half years without skipping. Instead of holding these pupils back and running the risk of them losing interest in their work, or enriching their course by bringing down problems that really belong on a more advanced level of the subject, these pupils are allowed to advance at their own maximum speed, so that they may get to the work on that grade level to which their advanced mental age entitles them. The problem of social adjustment which is always advanced whenever acceleration is advocated would not be a serious one if all the junior high schools of the state followed the practice of accelerating the most able 10-15% of their enrollment. From that group would undoubtedly be selected 30-40% of the college population of the state, a large enough group to guarantee them a satisfactory social environment. It is my contention that until such time as our materials of instruction are very much better adapted to individual needs than they are at present, our junior high schools can well afford to adopt a conservative program of acceleration and retardation for the groups at the extremes of ability. For those who are interested in looking further into this possibility I recommend "Ability Grouping in the Junior High School" by Mr. Ryan and Miss Crecelius of the Ben Blewett Junior High School in St. Louis; Macmillan Company, publishers.

Quantitative Adjustment. At present we are hearing a great deal about a quantitative adjustment to individual differences. This movement is based upon the assumption that, if only we would not require or expect as much work from slow learning and performing pupils as we do from those of higher and faster capacities, our problem would be solved. People who belong to this school talk a great deal about core curricula and minimum essentials, and about optional or supplementary material. They intend to base our educational program upon the intellectual and cultural needs of the dull normals. Adjustment to the needs of average students will be made by giving them the minimum course but increasing the numbers of problems to be solved, references to be read or units to be covered. Brilliant pupils, those of unfathomed capacity for creative thinking, will be given the same course as their less able fellows, except that they will be given more of it. The difficulty with this arrangement is that those pupils who need and enjoy repetition and drill get the least amount of it, and the pupils who need drill least and become quickly bored by repetition get great quantities of it. It is the boy who needs the most help to comprehend a process, and whose performance is the slowest, who needs to do the most problems to fix them in his mind.

Core Curruculum Is No Solution of the Problem. In an unpublished manuscript entitled, "Enrichment for Rapid Group Pupils in Secondary Schools," Dr. Brown and Mrs. Adams of the Los Angeles city schools make this important observation, "Highly endowed children do not do the same sort of thing as children of average intelligence more quickly and sooner, *they do it differently.* Differentiation over the same course of study, taking advantage of the obvious variations among children, to cover the same ground at varying rates of speed, is of comparatively little value." If this be true, the present attempt to establish core material for each subject and upon each grade level is ill-advised. In any course designed to impart skill or create appreciation there is precious little of common value to children of both low and high ability. That which is core material and essential for thhe lowest group is at the same time its ultimate objective. It is the stuff out of which these pupils are to grow to the fullest mastery of their powers, but what of its significance for the pupil of superior intelligence? For him it is pith and ashes. If it is a skill subject, he probably has command of it already or will grasp it intuitively. If it is in the realm of appreciation it is, in all probability, below his mental age level. If we are going to attack the problem of adjusting the curriculum to meet the needs of individual pupils in the junior high school seriously, we will have to build upon a sounder foundation than that of the core curriculum for all pupils. We will, I feel, be forced to establish minimum essentials adapted to the abilities and needs of pupils on at least three differentiated levels of ability. Within these differentiated groups there will still be differences of capacity, interest and rate of work sufficient to challenge all the adaptation of method and variation of quantity and quality which we can command.

Core Curriculum in Bridge Playing. Perhaps I can make my point clearer through illustration. Before turning to the offerings of the junior high school, suppose we try a field outside the school where we have fewer established points of view. If you were faced with the necessity of teaching the entire population, with all its differences of interest and capacity, the game of bridge, how would you adjust your curriculum? What are the minimum essentials of the game? What would you select as the core of your curriculum? I hope I will not be accused of being a hopeless fatalist if I say that, so far as bridge is concerned, there are people who can never hope to get out of the "dub" classification. Perhaps you have some of these people in your social set. If you are going to teach them to play bridge you will demonstrate how to shuffle, deal, and how to arrange a hand. You will teach them how to estimate their sure tricks, you will fix the habit of following suit and train them not to trump their partner's ace. That's the core for your low ability group, and it will not need much enrichment. Each step will have to be explained and demonstrated carefully. Instead of giving them references to read you will use real life situations, but with sufficient drill each step will be mastered, and your group will become enthusiastic devotees unless you make the mistake of bringing into the group some master of the game who is irritated by the slow pace at which they play, finesses out all the kings, and reviews each hand after the game is over.

Now let us consider an average group. All that you have worked so assiduously to get over to your lower group will be quickly grasped by this class and you will be able to proceed with the core of your curriculum, which will be to teach them to bid more skillfully, to remember the cards as they are played, to finess and to establish the suits in their own hands.

When you come to the group of highest ability you will find that, if they have ever seen their friends play bridge, they already know how to shuffle, deal, and arrange their hands. They want to know what the game is about and how they can calculate what cards their opponents hold. They are anxious to get at the fine points at once, and if you stop to drill on finessing you will lose their interest. They understood you the first time and will get their practice in that while picking up more difficult maneuvers. Explain the theory of the game to them, elaborate on the possibilities for scientific skill, start them playing, put a copy of Mr. Work in their hands,

and watch them grow. In less than a season they will have exhausted the possibilities of the ordinary game and will have taken up contract bridge or invented some difficult variation of their own.

I wonder if I have made my point clear. For all instructional purposes we have three distinct courses. To play bridge everyone has to know how to deal, count his cards, and follow suit, but it would be absurd to say that such rudimentary skills are the core of the curriculum for the fast-learning group. This situation is thoroughly analogous to our junior high school situation.

Teaching Literary Appreciation. What shall be our junior high school aim in literary appreciation, let us say, for the ninth grade?

Miss Herman, who is directing this curriculum study for the Los Angeles schools, says that if we can get our low ability groups to read the newspapers, the American Magazine, and Liberty magazine with understanding and some degree of discrimination, we shall have made an outstanding achievement. I hope you will not think me facetious if I set up the Saturday Evening Post as a higher activity which may be revealed for the more enterprising and able of the group. The average group can be led to read current fiction for something more than the plot, a higher type of magazine, and biographies. The fast-learning group with its ability to deal with abstract ideas should be led to revel in the best that the world's artists and thinkers have produced. They will be thrilled by many of the classics, they will want to know what is best in modern literature, and why. They can be prepared to read magazines of critical opinion and to regard the cheaper magazines with a mild cynicism. This I judge to be adjusting quantity and quality of material as well as methods of teaching, and it is not based upon the idea of a core or minimum essentials for all.

Tentative Course of Study in Junior High School English. If you have not seen the "Tentative Course of Study in Junior High School English," published in February of this year by the Psychology and Research Division of the Los Angeles City Schools, I commend it to you for study. Separate courses for the slow-learning, average-learning, and fast-learning groups have been tentatively established in the fields of reading, composition, language, and grammar. The needs of each of these groups, in the light of its capacity, have been carefully estimated and appropriate materials provided. For example, no grammar is offered the slow-learning group, but a great deal of grammar is included in the course for the fast-learning group. Again, only pupils of the fast-learning group are expected to learn to use "lie" and "lay" correctly.

Adaptation of Curriculum. In a recent address on "Adapting the Curriculum to Bright and Dull Pupils," Dr. Hopkins, of the University of Colorado, stressed this necessity of building differentiated courses with the types of material, standards of attainment, speed and amount of accomplishment, and methods of instruction—all adjusted to ability differences. It is a colossal task which confronts us, and we have very little scientific evidence upon which to build; but lack of scientific data is no excuse for inaction in the face of a paramount need. We will unearth our data as we attempt our solutions.

Curriculum Committees at Work. In the junior high school in South Pasadena we have been working on this problem during this school year. Every member of our faculty belongs to some one of the subject curriculum committees. At present these committees are meeting at least once a week. I do not know how long it will take us to develop a reasonable degree of the type of differentiation I have just been talking about, but we are making progress. This much can be said with assurance: such a faculty organization furnishes the best guarantee of a growing command, on the part of the teacher, of the subject-matter of her field. I cannot think of an important educational problem that cannot find a place in the work of these committees. I propose to maintain them from year to year as the permanent working organization of our faculty.

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A STUDY OF THE THREE-TERM PLAN VS. THE TWO-SEMESTER PLAN OF EVENING SCHOOL ORGANIZATION

K. L. STOCKTON, *Supervising Principal*

FLOYD R. HONN, *Principal*
Huntington Park Union Evening High School

MANY of the methods used in the administration of evening schools have been copied from procedures which have proven successful in the administration of day schools. In many cases even the card forms used in the day and evening schools are identical. There is no logical objection to the use of day school methods or forms in evening schools if they meet the needs of evening schools. When methods of organization and procedure different from those used in the day school promise greater success to evening school work, we believe they should be tried.

It is generally customary for evening high schools to divide their school years into two semesters after the conventional day school plan. In studying the records of attendance in the Huntington evening school we found that the attendance was greatest during the first month or two of the school year, that it slumped very badly about the first of December, and failed to improve much upon the resumption of school following Christmas vacation until the opening of the second semester about the first of February. The following table, showing the average evening school attendance per teacher per night at Huntington Park Union Evening High School, during the school year of 1927-1928, illustrates the point:

Month	**Av. Attendance per Teacher.*
September	24.54
October	19.73
November	16.40
December	13.24
January	15.25
February	16.33
March	17.16
April	17.54
May	16.40

The slump in attendance during the mid-winter months is significant.

The poor attendance during the month of December seems to be largely due to the fact that many evening school students work during this period of the year, or find it necessary to use the time they have been giving to evening school work in preparation for the holidays. The poor attendance in January seems to be due to the belief on the part of those who have dropped out that it is a hopeless job to try to catch up with their classes, and an unwillingness on the part of new students to enter the evening school toward the end of a semester.

We have felt that adult education should be offered to adults whenever adults find it most convenient to take the work. If they find it hard or impossible to attend during December, we believe the evening school should close its doors until the

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*The teachers at Huntington Park Union Evening High School are not all paid the same amount per evening. The standard evening school scale of payment is $4.50 for a two-hour teaching period. To give meaning to the term average attendance per teacher the term teacher represents a $4.50 payment for two hours of teaching. A teacher receiving $9.00 per evening would be counted as two teachers, etc.

majority find it convenient to take work again. The mere fact that the day school is in session does not necessitate or justify the maintenance of evening school. In keeping with our conclusions in this direction, the Huntington Park Union Evening High School this school year closed its doors one week before the Christmas vacation for the day school. This plan saved us from conducting the school at a heavy loss of attendance for one week, and was accepted generally on the part of the students in an appreciative spirit.

January, with its long evenings, should be the ideal month for evening school attendance on the part of most adults in the community. With the excitement of the holidays over, real work could be done in evening schools if conditions were conducive to entrance during the first part of the month. To utilize this month most advantageously this year, we cast aside the old semester plan of organization in our evening school, and adopted a three-term division of the evening school year. The first term began about the time of the opening of the day school in September and continued until the 6th of December. The second term began January 7th and ran until March 21st. The third term covers the period from April 1st to June 6th.

That the organization of the evening school year into three terms, rather than two semesters, has been successful in building up the attendance in January and early February is shown by the following table, comparing average attendances per teacher per night for the school years 1927-1928 and for six months of 1928-1929:

Month	*Av. per Teacher 1927-1928*	*Av. per Teacher 1928-1929*	*Gain or Loss, 1928-29*
September	24.54	23.09	—1.45
October	19.73	23.90	+ 4.17
November	16.40	18.36	+ 1.96
December	13.24	15.59	+ 2.35
January	15.25	19.05	+ 3.80
February	16.33	18.76	+ 2.43
March	17.16		
April	17.54		
May	16.40		

The number of classes offered during the two years was approximately the same. The gain in averages, therefore, has been a real gain in total attendance at no increase of cost to the school. The shorter terms have enabled us to offer short-term courses with greater success. The following table compares the average attendance per evening for the two years:

Month	*1927-1928*	*1928-1929*	*Percent gain*
September	569	590	2%
October	518	603	16%
November	429	461	8%
December	341	351	3%
January	374	531	42%
February	431	519	20%
March	446		
April	372		
May	276		

Whether there will be any considerable new enrollment for the spring or third term remains to be seen.

To what extent the influenza epidemic affected the evening school this year cannot be ascertained. That it was considerable, however, is shown by the great slump during the third month. That the attendance was distinctly better under the new system in spite of the "flu" speaks well for the system. Whether the three-term organization will work in communities other than Huntington Park can be determined only by experience. We hope other schools will try the plan and report their results.

OFFICERS AND COMMITTEES

of the

ASSOCIATION OF CALIFORNIA SECONDARY SCHOOL PRINCIPALS

L. P. Farris, Principal of the Alexander Hamilton Junior High School,* Oakland, was elected President of the Association, succeeding Homer Martin, Principal of the Santa Barbara High School, who had served as President for two years. Harry G. Hansell, Principal of the Part-Time High School of San Francisco, was elected Secretary-Treasurer, to succeed Mr. Farris who had served as Secretary-Treasurer during the past eight years. J. R. McKillop, Principal of the Selma Union High School, is Vice-President. The Executive Board is composed of the officers of the Association as *ex-officio members,* and Charles J. Booth, Ontario; Homer Martin, Santa Barbara; Bessie I. Cole, San Jose; Nicholas Ricciardi and Helen Heffernan of the State Department of Education, Sacramento.

President Farris has appointed committees for the ensuing year, as follows:

CLEARING HOUSE COMMITTEE

(a) Regional working committee in North:

J. O. Gossett, Chairman
Principal, Oakdale Union High School.

Wm. Otto, Principal
Theodore Roosevelt High School,
Fresno.

J. E. Carpenter, Principal
Part-Time High School,
Sacramento.

George I. Linn, Principal
Manteca Union High School.

Cleon Kersey, Principal
McKinley Evening High School,
Los Angeles.

(b) Regional working committee in South:

C. J. Booth, Chairman
Dean, Chaffey Junior College,
Ontario.

Elmer C. Jones
Director of Adult Education,
Long Beach.

H. A. Campion, Principal
Frank Wiggins Trade School,
Los Angeles.

Louis E. Plummer, Principal
Fullerton Union High School

Leroy Nichols, Principal
Turlock Union High School.

PROFESSIONAL GROWTH COMMITTEE

(a) Regional working committee in North:

Helen Heffernan, Chairman
Chief, Division of Rural Education,
Sacramento.

Anna G. Fraser, Principal
Woodrow Wilson Junior High School,
Oakland.

Dr. Ralph H. Bush, Dean,
Long Beach Junior College.

(b) Regional working committee in South:

Helen Heffernan, Chairman
Chief, Division of Rural Education,
Sacramento.

Arthur Gould, Assistant Superintendent,
Los Angeles.

Walter Bachrodt
Superintendent of Schools,
San Jose.

ANTI-FRATERNITY COMMITTEE

(a) Regional working committee in North:

Wm. F. Ewing, Chairman
Assistant Superintendent of Schools,
Oakland.

J. P. Nourse, Principal
Galileo High School,
San Francisco.

Bruce H. Painter, Principal
Petaluma High School

Dr. Geo. A. Rice, Principal
University High School,
Oakland.

H. O. Welty, Principal
Technical High School,
Oakland.

(b) Regional working committee in South:

Arthur Gould, Chairman
Assistant Superintendent,
Los Angeles.

J. W. Harbeson, Principal
Pasadena Junior College

Dr. Merton E. Hill, Principal
Chaffey Union High School and
Junior College, Ontario.

John L. Lounsbury, Principal
Woodrow Wilson High School and
Junior College,
Long Beach.

E. W. Oliver, Principal
Los Angeles High School.

** Mr. Farris was recently elected Principal of the Oakland High School, and will succeed Charles E. Keyes at the end of this school year. Mr. Keyes retires from the principalship of the Oakland High School after completing twenty-one years of notable service in that position, and at the end of thirty-two years in the Oakland school department. For a quarter of a century Mr. Keyes has been recognized in his city and among his professional associates in the State as a leading spirit in progressive educational movements. His distinguished services are to be continued in the Oakland schools in the new position of director of guidance in junior and senior high schools.*

FRATERNITY STUDY COMMITTEE

(a) Regional working committee in North:

Dr. Geo. A. Rice, Chairman
Principal, University High School,
Oakland.

J. P. Nourse, Principal
Galileo High School,
San Francisco.

Bruce H. Painter, Principal
Petaluma High School

(b) Regional working committee in South:

E. W. Oliver, Chairman
Principal, Los Angeles High School.

John L. Lounsbury, Principal
Woodrow Wilson High School and
Junior College,
Long Beach.

John W. Harbeson, Principal Pasadena
Junior College.

STATE-WIDE AFFILIATION COMMITTEE

Appointed in conjunction with the State Superintendent's Office

Dr. Merton E. Hill, Chairman
Principal, Chaffey Union High School
and Junior College,
Ontario.

Arthur Gould
Assistant Superintendent of Schools,
Los Angeles.

Homer Martin, Principal
Santa Barbara High School.

J. R. McKillop, Principal
Selma Union High School.

L. P. Farris, President,
Ex-Officio Member.

H. A. Spindt, Secretary
Principal of Kern County Union High
School and Junior College,
Bakersfield.

Ex-officio Members:

Mr. Vierling Kersey
Superintendent of Public Instruction.

Dr. Nicholas Ricciardi
Chief, Division of City Secondary
Schools.

Miss Helen Heffernan
Chief, Division of Rural Education.

SELLING EDUCATION TO THE COMMUNITY

GUSTINE UNION HIGH SCHOOL is in a strictly rural section of Merced County. The parents of its hundred pupils are mostly Portuguese, Italian and Danes. Prior to March 18, when the school held an evening session of both day and night classes, many of them had never seen a high school program in operation. On this occasion, aside from the parents, a large number of people in the community attended the program.

The typing classes demonstrated their ability on the typewriters. The typists were divided into five sections according to the amount of typing instruction taken in the school, and each section typed for a period of five minutes. The pupils also typed to music and demonstrated that they could type and carry on a conversation at the same time.

The shorthand classes demonstrated their ability to write shorthand from dictation. Some of the writing was done on a blackboard, so that the parents and the visitors could observe their work, and the pupils then read back the dictated matter which had been dictated to them. Both the first year shorthand pupils and the second year shorthand pupils participated in the program.

The school also conducted class recitations and the parents and visitors were given an opportunity to see how classes were carried on. Classes in Clothing, Typewriting, Music, English, Drawing, World's History, Bookkeeping, and Civics, were conducted for a period of thirty minutes. The class instruction proved interesting to the parents, most of whom had never seen a class conducted in a high school.

The freehand drawing and mechanical drawing classes had an exhibit of some excellent work, and the exhibit was enjoyed by the parents and visitors. The agricultural department of the high school during the evening conducted the Babcock milk tests and other bacteriological tests to show what the school has been doing along the line of milk production, Gustine being a dairy section of the State.

The Spanish class in third year Spanish presented a Spanish play which was given in the Spanish language to demonstrate the work of the language department. A Spanish dance and a Spanish song were also presented by the class.

The Home Economics department presented a fashion show, exhibiting work done by first year, second year and evening classes.

"A GREAT EDUCATIONAL EXPERIMENT"

AS MANY TEACHERS of the social sciences know, Dr. Harold Rugg and his associates at the Lincoln School of Teachers College, Columbia University, have been developing an entirely new course for the junior high school to replace the conventional courses in history, geography and civics. This course is an attempt to construct curriculum materials that will prepare young people for intelligent participation in the complex and changing life of the present time. It covers the general field included in courses in history, geography and civics, economics, sociology, etc. It is not, however, simply a reorganization of the materials now used in existing courses. It is rather a new departure in curriculum construction, based upon the hypothesis that the traditional courses and the older methods have proved inadequate to meet the imperative demands of contemporary life.

Perhaps no experimental course ever developed in the American schools has had the extensive trial that has been given to this Rugg material. The first booklets that developed Rugg's ideas were used in the Lincoln School from 1921 to 1922. Since 1922, they have been used in public and private schools in more than a hundred cooperating cities in all parts of the country. This new course has had a powerful effect in changing the courses in the social studies all over the United States. Some of the California cities that have cooperated, and are now using the Rugg pamphlets, are San Francisco, San Jose, Sacramento, Fresno, and many others.

From the teachers who have used the booklets, have come many suggestions for changes and improvements and they are still in the process of revision. The course, and the books based on the course, are therefore a great cooperative enterprise representing the views and experiences of thousands of progressive teachers.

This experiment is still continuing. All schools and teachers interested, who desire to cooperate in it, are requested to write to Dr. Harold Rugg, The Lincoln School, 425 West 123 Street, New York City, who will send full information regarding the SOCIAL SCIENCE PAMPHLETS.

Early in August, 1929, however, the first of the school textbooks based on the pamphlets, and revised in accordance with the valuable criticisms and suggestions made by the hundreds of cooperators, will be available for distribution through GINN AND COMPANY, the publishers. This material for the seventh grade first term will include a pupil's reading book entitled *An Introduction to American Civilization,* the *Pupil's Work Book* for *An Introduction to American Civilization,* and the Teachers' Guide.

GINN AND COMPANY will publish in December the material for the high seventh grade, so that schools introducing *An Introduction to American Civilization* in their low seventh grades this fall may be sure of the books to follow when ready for them. Books for the eighth and ninth grades will appear later.

All those interested in this course in its published form are requested to write for further information to GINN AND COMPANY, 45 Second Street, San Francisco, California.

OPPORTUNITIES IN ART

"Opportunities in Art other than in teaching are impressed upon us as we glance at a list of the graduates of the California School of Arts and Crafts Studio; *Fashion Illustrator; Display Artist; Architectural Designer;* for the 1928-29 session.

"On the first page of this list we note among other designations after the names of the graduates, the following: *Art Department,* Variety Store; *Commercial Artist,* Coler Advertising Agency; *Illustrator,* Department of Geology; *Advertising Artist; Draftsman; Professional Letterer; Designer; Costume Designer; Interior Decorator; Art Librarian; Etcher; Landscape Painter; Decorator of Fine Furniture; Art Adviser; Manager,* Arts and Crafts Studio; *Fashion Illustrator; Display Artist; Architectural Designer; Poster Artist,* etc. There are, too, several pages of the list of *supervisors* and *teachers,* and we note by the catalog that the threefold purpose of this school has remained unchanged: First, to train artists, designers and craftsmen for the industrial and commercial arts; Second, to train teachers of drawing and craft work; Third, to train for culture and the fine arts."

We quote the above from an article in EVERYDAY ART by Mr. Knouff, president of the American Crayon Co. The writer proceeds by referring to Roger Bobsin's writings, to a bulletin of the Royal Bank of Canada, and to methods of automobile industry, all to illustrate the accepted importance of art in the world of business enterprise. Also to Dr. William McAndrew, chairman of the Curriculum Building Committee of the N. E. A., who says:

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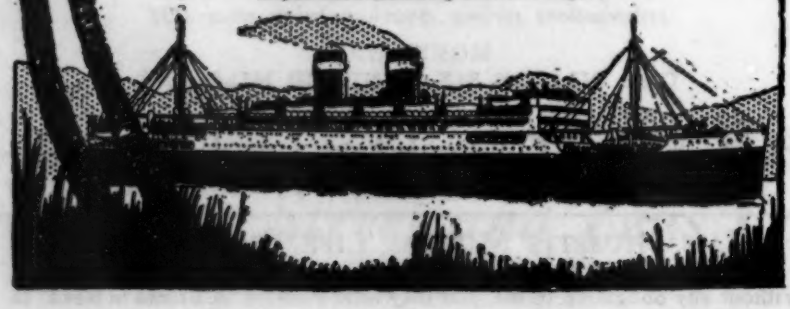

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